

## Additional File 1

### Low prevalence of spin in conclusions of interventional pediatric orthopedic studies

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- Table. Spin classification used to assess included articles of non-randomized studies assessing therapeutic interventions, with practical examples: pages 43-45

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### Search Terms and Strategy

**Search:** (((((((((((((((((((((((((((("clinical trial"[Publication Type]) OR ("comparative study"[Publication Type])) OR ("controlled clinical trial"[Publication Type])) NOT ("randomized controlled trial"[Publication Type])) AND ("J Child Orthop"[Journal]) OR ("Journal of children's orthopaedics"[Journal]) OR ("J Bone Joint Surg Am"[Journal]) OR ("The Journal of bone and joint surgery. American volume"[Journal]) OR ("J Am Acad Orthop Surg"[Journal]) OR ("The Journal of the American Academy of Orthopaedic Surgeons"[Journal]) OR ("J Pediatr Orthop B"[Journal]) OR ("Journal of pediatric orthopedics. Part B"[Journal]) OR ("J Pediatr Orthop"[Journal]) OR ("Journal of pediatric orthopedics"[Journal]) OR ("Arch Orthop Trauma Surg"[Journal]) OR ("Archives of orthopaedic and trauma surgery"[Journal]) OR ("Clin Orthop Relat Res"[Journal]) OR ("Clinical orthopaedics and related research"[Journal]) OR ("Knee Surg Sports Traumatol Arthrosc"[Journal]) OR ("Knee surgery, sports traumatology, arthroscopy : official journal of the ESSKA"[Journal]) OR ("Int Orthop"[Journal]) OR ("International orthopaedics"[Journal]) OR ("Bone Joint J"[Journal]) OR ("The bone joint journal"[Journal])) ) ) Filters: Clinical Trial, Comparative Study, Humans, Child: birth-18 years, from 2020 - 2023  
193 selected items

[Publication Characteristics \(Publication Types\)](#) with Scope Notes

### Initial Search Results

Items 1-193 of 193 ([Display the 193 citations in PubMed](#))

1. [Prospective, Randomized Ponseti Treatment for Clubfoot: Orthopaedic Surgeons Versus Physical Therapists.](#)  
Chen SN, Ragsdale TD, Rhodes LN, Locke LL, Moisan A, Kelly DM.  
J Pediatr Orthop. 2023 Feb 1;43(2):e93-e99. doi: 10.1097/BPO.0000000000002291. Epub 2022 Nov 4.  
PMID: 36607913 Clinical Trial.
2. [Platelet-rich plasma injection for acute Achilles tendon rupture : two-year follow-up of the PATH-2 randomized, placebo-controlled, superiority trial.](#)  
Keene DJ, Alsousou J, Harrison P, O'Connor HM, Wagland S, Dutton SJ, Hulley P, Lamb SE, Willett K; PATH-2 Trial group.  
Bone Joint J. 2022 Nov;104-B(11):1256-1265. doi: 10.1302/0301-620X.104B11.BJJ-2022-0653.R1.  
PMID: 36317349 Free PMC article. Clinical Trial.
3. [Postoperative outcomes of pedicle screw instrumentation for adolescent idiopathic scoliosis with and without a subfascial wound drain: a multicentre randomized controlled trial.](#)  
Helenius L, Gerdhem P, Ahonen M, Syvänen J, Jalkanen J, Charalampidis A, Nietosvaara Y, Helenius I.  
Bone Joint J. 2022 Sep;104-B(9):1067-1072. doi: 10.1302/0301-620X.104B9.BJJ-2022-0391.R1.  
PMID: 36047026 Clinical Trial.
4. [Testing of an Ultrasound-Limited Imaging Protocol for Pavlik harness Supervision \(TULIPPS\) in developmental dysplasia of the hip: a randomized controlled trial.](#)  
Behman AL, Bradley CS, Maddock CL, Sharma S, Kelley SP.  
Bone Joint J. 2022 Sep;104-B(9):1081-1088. doi: 10.1302/0301-620X.104B9.BJJ-2022-0350.R2.  
PMID: 36047018 Clinical Trial.
5. [Virtual Reality Reduces Fear and Anxiety During Pediatric Orthopaedic Cast Room Procedures: A Randomized Controlled Trial.](#)  
Richey AE, Hastings KG, Karius A, Segovia NA, Caruso TJ, Frick S, Rodriguez S.  
J Pediatr Orthop. 2022 Nov-Dec 01;42(10):600-607. doi: 10.1097/BPO.0000000000002250. Epub 2022 Aug 30.

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- PMID: 36040069 Clinical Trial.
6. [Outcomes of Intramedullary Nailing and External Fixation of Open Tibial Fractures: Three to Five-Year Follow-up of a Randomized Clinical Trial.](#)  
Cortez A, Urva M, Haonga B, Donnelley CA, von Kaeppler EP, Roberts HJ, Shearer DW, Morshed S. J Bone Joint Surg Am. 2022 Nov 2;104(21):1877-1885. doi: 10.2106/JBJS.22.00016. Epub 2022 Aug 17.  
PMID: 35980080 Clinical Trial.
  7. [Is modified reverse step-cut osteotomy better than Yun's reverse V osteotomy in paediatric cubitus varus deformity correction? A prospective, double-blinded, randomized controlled trial.](#)  
Kumar R, Rangasamy K, Raj Gopinathan N, Sudesh P, Goni VG. Int Orthop. 2022 Sep;46(9):2041-2053. doi: 10.1007/s00264-022-05429-7. Epub 2022 May 10.  
PMID: 35536366 Clinical Trial.
  8. [Implicit Racial Bias in Pediatric Orthopaedic Surgery.](#)  
Guzek R, Goodbody CM, Jia L, Sabatini CS, Sankar WN, Williams BA, Shah AS. J Pediatr Orthop. 2022 Aug 1;42(7):393-399. doi: 10.1097/BPO.0000000000002170. Epub 2022 May 9.  
PMID: 35522848 Clinical Trial.
  9. [The British Orthopaedic Surgery Surveillance study: Perthes' disease: the epidemiology and two-year outcomes from a prospective cohort in Great Britain.](#)  
Perry DC, Arch B, Appelbe D, Francis P, Craven J, Monsell FP, Williamson P, Knight M; BOSS collaborators. Bone Joint J. 2022 Apr;104-B(4):510-518. doi: 10.1302/0301-620X.104B4.BJJ-2021-1708.R1.  
PMID: 35360941 Free PMC article. Clinical Trial.
  10. [The Knee Injury and Osteoarthritis Outcome Score Does Not Have Adequate Structural Validity for Use With Young, Active Patients With ACL Tears.](#)  
Marmura H, Tremblay PF, Getgood AMJ, Bryant DM. Clin Orthop Relat Res. 2022 Jul 1;480(7):1342-1350. doi: 10.1097/CORR.0000000000002158. Epub 2022 Mar 2.  
PMID: 35238805 Clinical Trial.
  11. [Observation Versus Cast Treatment of Toddler's Fractures.](#)  
Fox J, Enriquez B, Bompadre V, Carlin K, Dales M. J Pediatr Orthop. 2022 May-Jun 01;42(5):e480-e485. doi: 10.1097/BPO.0000000000002086.  
PMID: 35180728 Clinical Trial.
  12. [Elastic stable intramedullary nailing versus submuscular plating in pediatric diaphyseal femur fractures: a randomized controlled trial among children in South India.](#)  
James D, Martin D, Kumar A, Krishnan S, Gahukamble A, Madhuri V, David T, Palocaren T. J Pediatr Orthop B. 2022 Mar 1;31(2):e122-e129. doi: 10.1097/BPB.0000000000000933.  
PMID: 35102105 Clinical Trial.
  13. [A comparison of the post-fusion outcome of patients with early-onset scoliosis treated with traditional and magnetically controlled growing rods.](#)  
Tahir M, Mehta D, Sandhu C, Jones M, Gardner A, Mehta JS. Bone Joint J. 2022 Feb;104-B(2):257-264. doi: 10.1302/0301-620X.104B2.BJJ-2021-1198.R1.  
PMID: 35094579
  14. [Postoperative immobilization using a short-arm cast in the semisupination position is appropriate after arthroscopic triangular fibrocartilage complex foveal repair.](#)  
Jung HS, Park JG, Park HJ, Lee JS. Bone Joint J. 2022 Feb;104-B(2):249-256. doi: 10.1302/0301-620X.104B2.BJJ-2021-0592.R2.  
PMID: 35094578
  15. [Assessment of deep vein thrombosis using routine pre- and postoperative duplex Doppler ultrasound in patients with pelvic trauma : a prospective study.](#)

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- Cerbasi S, Bernasconi A, Balato G, Dimitri F, Zingaretti O, Orabona G, Pascarella R, Mariconda M. Bone Joint J. 2022 Feb;104-B(2):283-289. doi: 10.1302/0301-620X.104B2.BJJ-2021-0764.R2. PMID: 35094570 Clinical Trial.
16. [Posterior-only stabilization versus global reconstruction in thoracic and thoracolumbar spinal tuberculosis; a prospective randomized study.](#)  
Ramakrishnan RK, Barma SD, Shetty AP, Viswanathan VK, Kanna RM, Rajasekaran S. Int Orthop. 2022 Mar;46(3):597-603. doi: 10.1007/s00264-021-05296-8. Epub 2022 Jan 12. PMID: 35020025 Clinical Trial.
  17. [Local Anesthetic Injection Before Incision Decreases General Anesthesia Requirements in Pediatric Trigger Thumb Release: A Randomized Controlled Trial.](#)  
Lin EE, Fazal FZ, Pearsall MF, Talwar D, Chang H, Shah AS. J Pediatr Orthop. 2022 Mar 1;42(3):e285-e289. doi: 10.1097/BPO.0000000000002042. PMID: 34967805 Clinical Trial.
  18. [Impact of Cost Information on Parental Decision Making: A Randomized Clinical Trial Evaluating Cast Versus Splint Selection for Pediatric Distal Radius Buckle Fractures.](#)  
Lawrence JTR, MacAlpine EM, Buczek MJ, Horn BD, Williams BA, Manning K, Shah AS. J Pediatr Orthop. 2022 Jan 1;42(1):e15-e20. doi: 10.1097/BPO.0000000000001980. PMID: 34889832 Clinical Trial.
  19. [The modified Stulberg classification is a strong predictor of the radiological outcome 20 years after the diagnosis of Perthes' disease.](#)  
Huhnstock S, Wiig O, Merckoll E, Svenningsen S, Terjesen T. Bone Joint J. 2021 Dec;103-B(12):1815-1820. doi: 10.1302/0301-620X.103B12.BJJ-2021-0515.R1. PMID: 34847712 Clinical Trial.
  20. [Is capsulorrhaphy a necessary step during open reduction of developmental dysplasia of the hip? A randomized controlled trial.](#)  
Badawy MY, Afifi A, Shaker ES, Elbarbary H, Hegazy M, Mohamed MT, Arafa A. Int Orthop. 2022 Mar;46(3):589-596. doi: 10.1007/s00264-021-05267-z. Epub 2021 Nov 24. PMID: 34817631 Clinical Trial.
  21. [Does the use of ultrasound guidance during percutaneous Achilles tendon tenotomy improve outcomes of clubfoot management? A randomized controlled trial.](#)  
Kumar P, Baburaj V, Bist O, Belludi PS, Sudesh P. J Pediatr Orthop B. 2022 Mar 1;31(2):e190-e194. doi: 10.1097/BPB.0000000000000934. PMID: 34751177 Clinical Trial.
  22. [Use of Bedside Entertainment and Relaxation Theater \(BERT\) to Reduce Fear and Anxiety Associated With Outpatient Procedures in Pediatric Orthopaedics.](#)  
Richey AE, Khoury M, Segovia NA, Hastings KG, Caruso TJ, Frick S, Rodriguez S. J Pediatr Orthop. 2022 Jan 1;42(1):30-34. doi: 10.1097/BPO.0000000000002005. PMID: 34739431 Clinical Trial.
  23. [How Do We Best Educate Our Patients' Caregivers? Comparing the Efficacy of Print Versus Media-based Education Materials in Peripheral Nerve Catheter and Pain Pump Education.](#)  
Parikh HB, Gagliardi AG, Carry PM, Albright JC, Mandler TN. J Pediatr Orthop. 2022 Jan 1;42(1):35-39. doi: 10.1097/BPO.0000000000001997. PMID: 34723897 Clinical Trial.
  24. [Matched Comparison of Magnetically Controlled Growing Rods with Traditional Growing Rods in Severe Early-Onset Scoliosis of  \$\geq 90^\circ\$ : An Interim Report on Outcomes 2 Years After Treatment.](#)  
Saarinen AJ, Sponseller PD, Andras LM, Skaggs DL, Emans JB, Thompson GH, Helenius IJ; Pediatric Spine Study Group. J Bone Joint Surg Am. 2022 Jan 5;104(1):41-48. doi: 10.2106/JBJS.20.02108. PMID: 34644282

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25. [Oral tranexamic acid for an additional 24 hours postoperatively versus a single preoperative intravenous dose for reducing blood loss in total knee arthroplasty: results of a randomized controlled trial \(TRAC-24\).](#)  
Magill P, Hill JC, Bryce L, Martin U, Dorman A, Hogg R, Campbell C, Gardner E, McFarland M, Bell J, Benson G, Beverland D.  
Bone Joint J. 2021 Oct;103-B(10):1595-1603. doi: 10.1302/0301-620X.103B10.BJJ-2020-2308.R1. PMID: 34587808 Clinical Trial.
26. [Thromboembolic and bleeding complications following primary total knee arthroplasty : a Danish nationwide cohort study.](#)  
Schelde AB, Petersen J, Jensen TB, Gromov K, Overgaard S, Olesen JB, Jimenez-Solem E.  
Bone Joint J. 2021 Oct;103-B(10):1571-1577. doi: 10.1302/0301-620X.103B10.BJJ-2021-0023.R1. PMID: 34587805
27. [What Are the Long-term Surgical Outcomes of Compressive Endoprosthetic Osseointegration of the Femur with a Minimum 10-year Follow-up Period?](#)  
Groundland J, Brown JM, Monument M, Bernthal N, Jones KB, Randall RL.  
Clin Orthop Relat Res. 2022 Mar 1;480(3):539-548. doi: 10.1097/CORR.0000000000001979. PMID: 34559734
28. [A Prospective, Median 15-Year Comparison of Ponseti Casting and Surgical Treatment of Clubfoot.](#)  
Recordon JAF, Halanski MA, Boocock MG, McNair PJ, Stott NS, Crawford HA.  
J Bone Joint Surg Am. 2021 Nov 3;103(21):1986-1995. doi: 10.2106/JBJS.20.02014. PMID: 34547011
29. [Radiographs of 366 removed limb-lengthening nails reveal differences in bone abnormalities between different nail types.](#)  
Iobst CA, Frost MW, Rölfing JD, Rahbek O, Bafor A, Duncan M, Kold S.  
Bone Joint J. 2021 Nov;103-B(11):1731-1735. doi: 10.1302/0301-620X.103B.BJJ-2021-0549.R1. Epub 2021 Aug 20. PMID: 34414785
30. [Does Local Zoledronate Applied to Pasteurized Bone Autografts Improve the Likelihood of Union of Graft-Host Junctions after Limb-sparing Surgery?](#)  
Kiatissevi P, Sukanthanak B, Piakong P, Kittithamvongs P.  
Clin Orthop Relat Res. 2022 Jan 1;480(1):109-120. doi: 10.1097/CORR.0000000000001942. PMID: 34406138 Free PMC article.
31. [Fewer Adverse Events Following Outpatient Compared with Inpatient Unicompartmental Knee Arthroplasty.](#)  
Hur ES, Serino J, Bohl DD, Della Valle CJ, Gerlinger TL.  
J Bone Joint Surg Am. 2021 Nov 17;103(22):2096-2104. doi: 10.2106/JBJS.20.02157. PMID: 34398841
32. [Cryoablation-aided joint retention surgery for epiphysis involvement in osteosarcoma compared with endoprosthetic replacement.](#)  
Li J, Lu Y, Chen G, Li M, Xiao X, Ji C, Wang Z, Guo Z.  
Bone Joint J. 2021 Aug;103-B(8):1421-1427. doi: 10.1302/0301-620X.103B8.BJJ-2020-2528.R2. PMID: 34334045
33. [Volar Plate Fixation Versus Cast Immobilization in Acceptably Reduced Intra-Articular Distal Radial Fractures: A Randomized Controlled Trial.](#)  
Selles CA, Mulders MAM, Winkelhagen J, van Eerten PV, Goslings JC, Schep NWL; VIPAR Collaborators.  
J Bone Joint Surg Am. 2021 Nov 3;103(21):1963-1969. doi: 10.2106/JBJS.20.01344. PMID: 34314402 Clinical Trial.
34. [Capsular Repair During Hip Arthroscopy Demonstrates Restoration of Axial Distraction Resistance in an in Vivo Intraoperative Testing Model.](#)  
O'Neill DC, Tomasevich KM, Mortensen AJ, Featherall J, Ohlsen SM, Aoki SK.

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- J Bone Joint Surg Am. 2021 Nov 3;103(21):1977-1985. doi: 10.2106/JBJS.20.01932.  
PMID: 34314401 Clinical Trial.
35. [Cost Analysis of Volar Plate Fixation Versus Plaster Cast Immobilization for Intra-Articular Distal Radial Fractures.](#)  
Selles CA, Mulders MAM, van Dieren S, Goslings JC, Schep NWL; VIPAR Collaborators.  
J Bone Joint Surg Am. 2021 Nov 3;103(21):1970-1976. doi: 10.2106/JBJS.20.01345.  
PMID: 34314400 Clinical Trial.
  36. [Rate of Scoliosis Correction After Anterior Spinal Growth Tethering for Idiopathic Scoliosis.](#)  
Takahashi Y, Saito W, Yaszay B, Bartley CE, Bastrom TP, Newton PO.  
J Bone Joint Surg Am. 2021 Sep 15;103(18):1718-1723. doi: 10.2106/JBJS.20.02071.  
PMID: 34288633
  37. [Measurable Thoracic Motion Remains at 1 Year Following Anterior Vertebral Body Tethering, with Sagittal Motion Greater Than Coronal Motion.](#)  
Buyuk AF, Milbrandt TA, Mathew SE, Larson AN.  
J Bone Joint Surg Am. 2021 Dec 15;103(24):2299-2305. doi: 10.2106/JBJS.20.01533.  
PMID: 34270505 Clinical Trial.
  38. [Comparison of Outcomes by Reconstructive Strategy in Patients with Prostheses for Proximal Femoral Focal Deficiency.](#)  
Floccari LV, Jeans KA, Herring JA, Johnston CE, Karol LA.  
J Bone Joint Surg Am. 2021 Oct 6;103(19):1817-1825. doi: 10.2106/JBJS.20.02001.  
PMID: 34270496
  39. [High compliance with the injury prevention exercise programme Knee Control is associated with a greater injury preventive effect in male, but not in female, youth floorball players.](#)  
Åkerlund I, Waldén M, Sonesson S, Lindblom H, Hägglund M.  
Knee Surg Sports Traumatol Arthrosc. 2022 Apr;30(4):1480-1490. doi: 10.1007/s00167-021-06644-2. Epub 2021 Jul 2.  
PMID: 34213586 Free PMC article. Clinical Trial.
  40. [Oral tranexamic acid for an additional 24 hours postoperatively versus a single preoperative intravenous dose for reducing blood loss in total hip arthroplasty: results of a randomized controlled trial \(TRAC-24\).](#)  
Magill P, Hill JC, Bryce L, Martin U, Dorman A, Hogg R, Campbell C, Gardner E, McFarland M, Bell J, Benson G, Beverland D.  
Bone Joint J. 2021 Jul;103-B(7):1197-1205. doi: 10.1302/0301-620X.103B7.BJJ-2020-2309.R1.  
PMID: 34192922 Clinical Trial.
  41. [The foot external rotation above-knee \(FERAK\) brace versus the Denis Browne brace for management of idiopathic clubfoot following Ponseti casting: a randomized controlled trial.](#)  
Hegazy M, El Barbary H, Hammoud M, Arafa A, Mohamed MT, Barakat AS, Afifi A.  
Int Orthop. 2022 Feb;46(2):313-319. doi: 10.1007/s00264-021-05107-0. Epub 2021 Jun 13.  
PMID: 34120232 Clinical Trial.
  42. [Single-bone versus both-bone plating of unstable paediatric both-bone forearm fractures. A randomized controlled clinical trial.](#)  
Khaled M, Fadle AA, Attia AK, Sami A, Hafez A, Abol Oyouun N.  
Int Orthop. 2022 Jan;46(1):105-114. doi: 10.1007/s00264-021-05097-z. Epub 2021 Jun 12.  
PMID: 34120195 Free PMC article. Clinical Trial.
  43. [Anatomic single vs. double-bundle ACL reconstruction: a randomized clinical trial-Part 1: clinical outcomes.](#)  
Irrgang JJ, Tashman S, Patterson CG, Musahl V, West R, Oostdyk A, Galvin B, Poploski K, Fu FH.  
Knee Surg Sports Traumatol Arthrosc. 2021 Aug;29(8):2665-2675. doi: 10.1007/s00167-021-06585-w. Epub 2021 May 10.  
PMID: 33970295 Free PMC article. Clinical Trial.

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44. [Ankle osteonecrosis in fifty-one children and adolescent's leukemia survivors: a prospective randomized study on percutaneous mesenchymal stem cells treatment.](#)  
Hernigou P, Auregan JC, Dubory A, Flouzat Lachaniette CH, Rouard H.  
Int Orthop. 2021 Sep;45(9):2383-2393. doi: 10.1007/s00264-021-05051-z. Epub 2021 Apr 23.  
PMID: 33893522 Clinical Trial.
45. [Spinal Anesthesia is Superior to General Anesthesia for Percutaneous Achilles Tenotomy in Infants.](#)  
Acquaviva MA, Caltoun CB, Bielski RJ, Loder RT, Boyer TJ, Cossu AE, Castelluccio PF.  
J Pediatr Orthop. 2021 Jul 1;41(6):352-355. doi: 10.1097/BPO.0000000000001826.  
PMID: 33843786
46. [Functional and radiographic comparison of subtalar arthroereisis and lateral calcaneal lengthening in the surgical treatment of flexible flatfoot in children.](#)  
Tahririan MA, Ramtin S, Taheri P.  
Int Orthop. 2021 Sep;45(9):2291-2298. doi: 10.1007/s00264-020-04899-x. Epub 2021 Apr 1.  
PMID: 33796883 Clinical Trial.
47. [Long-term outcomes of curved intertrochanteric varus osteotomy combined with bone impaction grafting for non-traumatic osteonecrosis of the femoral head.](#)  
Osawa Y, Seki T, Okura T, Takegami Y, Ishiguro N, Hasegawa Y.  
Bone Joint J. 2021 Apr;103-B(4):665-671. doi: 10.1302/0301-620X.103B4.BJJ-2020-1107.R1.  
PMID: 33789486 Free PMC article.
48. [Neither operative nor nonoperative approach is superior for treating displaced midshaft clavicle fractures: a partially blinded randomized controlled clinical trial.](#)  
Ban I, Kristensen MT, Barfod KW, Eschen J, Kallemose T, Troelsen A.  
Bone Joint J. 2021 Apr;103-B(4):762-768. doi: 10.1302/0301-620X.103B4.BJJ-2020-1636.R1.  
PMID: 33789482 Clinical Trial.
49. [Posterior Tibial Slope is Increased in Patients With Tibial Tubercle Fractures and Osgood-Schlatter Disease.](#)  
Sheppard ED, Ramamurti P, Stake S, Stadecker M, Rana MS, Oetgen ME, Young ML, Martin BD.  
J Pediatr Orthop. 2021 Jul 1;41(6):e411-e416. doi: 10.1097/BPO.0000000000001818.  
PMID: 33782370
50. [Quadriceps and hamstring tendon autografts in ACL reconstruction yield comparably good results in a prospective, randomized controlled trial.](#)  
Horstmann H, Petri M, Tegtbur U, Felmet G, Krettek C, Jagodzinski M.  
Arch Orthop Trauma Surg. 2022 Feb;142(2):281-289. doi: 10.1007/s00402-021-03862-8. Epub 2021 Mar 19.  
PMID: 33742222 Free PMC article. Clinical Trial.
51. [Patients With Symptomatic Sequelae of Slipped Capital Femoral Epiphysis Have Advanced Cartilage Wear at the Time of Surgical Intervention.](#)  
Lieberman EG, Pascual-Garrido C, Abu-Amer W, Nepple JJ, Shoenecker PL, Clohisy JC.  
J Pediatr Orthop. 2021 Jul 1;41(6):e398-e403. doi: 10.1097/BPO.0000000000001797.  
PMID: 33734202
52. [Open Reduction of Medial Epicondyle Fractures in the Pediatric Population: Supine Versus Prone Position.](#)  
Baghdadi S, Weltsch D, Arkader A, Harwood K, Lawrence JTR.  
J Pediatr Orthop. 2021 May-Jun 01;41(5):273-278. doi: 10.1097/BPO.0000000000001794.  
PMID: 33734199
53. [Squeaking Is Common and Increases Over Time Among Patients With Long-term Follow-up After Ceramic-on-ceramic THA.](#)  
Taniguchi K, Quacinella M, Barlow B.  
Clin Orthop Relat Res. 2021 Apr 1;479(4):736-744. doi: 10.1097/CORR.0000000000001472.  
PMID: 33724977 Free PMC article.

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54. [Synthetic Cast Material Versus Plaster of Paris for the Treatment of Idiopathic Clubfoot by the Ponseti Protocol: A Comparative Analysis of 136 Feet.](#)  
Monforte S, Alberghina F, Paonessa M, Canavese F, Andreacchio A.  
J Pediatr Orthop. 2021 May-Jun 01;41(5):296-300. doi: 10.1097/BPO.0000000000001788.  
PMID: 33710129
55. [The Ponseti Method for the Treatment of Clubfeet Associated With Amniotic Band Syndrome: A Single Institution 20-Year Experience.](#)  
Esparza M, Tran E, Richards BS, Jo CH, Shivers C, Karacz C, Polk J, Riccio AI.  
J Pediatr Orthop. 2021 May-Jun 01;41(5):301-305. doi: 10.1097/BPO.0000000000001789.  
PMID: 33710127
56. [Contemporary Outpatient Arthroplasty Is Safe Compared with Inpatient Surgery: A Propensity Score-Matched Analysis of 574,375 Procedures.](#)  
Lan RH, Samuel LT, Grits D, Kamath AF.  
J Bone Joint Surg Am. 2021 Apr 7;103(7):593-600. doi: 10.2106/JBJS.20.01307.  
PMID: 33646984
57. [Does total hip arthroplasty have a higher risk of failure in patients who undergo lumbar spinal fusion?](#)  
Di Martino A, Bordini B, Ancarani C, Viceconti M, Faldini C.  
Bone Joint J. 2021 Mar;103-B(3):486-491. doi: 10.1302/0301-620X.103B3.BJJ-2020-1209.R1.  
PMID: 33641423
58. [What Is the Comparative Ability of 18F-FDG PET/CT, 99mTc-MDP Skeletal Scintigraphy, and Whole-body MRI as a Staging Investigation to Detect Skeletal Metastases in Patients with Osteosarcoma and Ewing Sarcoma?](#)  
Aryal A, Kumar VS, Shamim SA, Gamanagatti S, Khan SA.  
Clin Orthop Relat Res. 2021 Aug 1;479(8):1768-1779. doi: 10.1097/CORR.0000000000001681.  
PMID: 33635285 Free PMC article.
59. [Anatomic single- and double-bundle ACL reconstruction both restore dynamic knee function: a randomized clinical trial-part II: knee kinematics.](#)  
Tashman S, Zandiyeh P, Irrgang JJ, Musahl V, West RV, Shah N, Fu FH.  
Knee Surg Sports Traumatol Arthrosc. 2021 Aug;29(8):2676-2683. doi: 10.1007/s00167-021-06479-x. Epub 2021 Feb 22.  
PMID: 33615404 Free PMC article. Clinical Trial.
60. [Long-term Functional Outcomes and Complications in Operative Versus Nonoperative Treatment for Displaced Midshaft Clavicle Fractures in Adolescents: A Retrospective Comparative Study.](#)  
Riiser MO, Molund M.  
J Pediatr Orthop. 2021 May-Jun 01;41(5):279-283. doi: 10.1097/BPO.0000000000001768.  
PMID: 33606445
61. [Outcomes of a Minimally Invasive Approach for Congenital Vertical Talus With a Comparison Between the Idiopathic and Syndromic Feet.](#)  
Hafez M, Davis N.  
J Pediatr Orthop. 2021 Apr 1;41(4):249-254. doi: 10.1097/BPO.0000000000001769.  
PMID: 33560706
62. [The PINS Trial: a prospective randomized clinical trial comparing a traditional versus an emollient skincare regimen for the care of pin-sites in patients with circular frames.](#)  
Ferguson D, Harwood P, Allgar V, Roy A, Foster P, Taylor M, Moulder E, Sharma H.  
Bone Joint J. 2021 Feb;103-B(2):279-285. doi: 10.1302/0301-620X.103B2.BJJ-2020-0680.R1.  
PMID: 33517738 Clinical Trial.
63. [Does the Addition of a Vascularized Fibula Improve the Results of a Massive Bone Allograft Alone for Intercalary Femur Reconstruction of Malignant Bone Tumors in Children?](#)  
Errani C, Alfaro PA, Ponz V, Colangeli M, Donati DM, Manfrini M.  
Clin Orthop Relat Res. 2021 Jun 1;479(6):1296-1308. doi: 10.1097/CORR.0000000000001639.



## Additional File 1

PMID: 33497066 Free PMC article.

64. [Is There a Benefit to Weaning Pavlik Harness Treatment in Infantile DDH?](#)  
Bram JT, Gohel S, Castañeda PG, Sankar WN.  
J Pediatr Orthop. 2021 Mar 1;41(3):143-148. doi: 10.1097/BPO.0000000000001753.  
PMID: 33448722
65. [Comparison of Short-leg and Long-leg Casts for the Treatment of Distal Third Tibial Shaft Fractures in Children.](#)  
Barnett SA, Fontenot B, Leonardi C, Gonzales JA, Gargiulo D, Heffernan MJ.  
J Pediatr Orthop. 2021 Mar 1;41(3):e259-e265. doi: 10.1097/BPO.0000000000001741.  
PMID: 33417388
66. [Lower body mass index and age are predictive of improved pain and health utility scores following arthroscopic management of femoroacetabular impingement.](#)  
Kay J, Simunovic N, Heels-Ansdell D, Bhandari M, Ayeni OR; FIRST Investigators.  
Knee Surg Sports Traumatol Arthrosc. 2021 May;29(5):1461-1473. doi: 10.1007/s00167-020-06395-6. Epub 2021 Jan 5.  
PMID: 33398481 Clinical Trial.
67. [Can the Femoro-Epiphyseal Acetabular Roof \(FEAR\) Index Be Used to Distinguish Dysplasia from Impingement?](#)  
Smith JT, Jee Y, Daley E, Koueiter DM, Beck M, Zaltz I.  
Clin Orthop Relat Res. 2021 May 1;479(5):962-971. doi: 10.1097/CORR.0000000000001610.  
PMID: 33394581 Free PMC article.
68. [A comparison of conventional and minimally invasive multilevel surgery for children with diplegic cerebral palsy.](#)  
Edwards TA, Thompson N, Prescott RJ, Stebbins J, Wright JG, Theologis T.  
Bone Joint J. 2021 Jan;103-B(1):192-197. doi: 10.1302/0301-620X.103B1.BJJ-2020-0714.R1.  
PMID: 33380192
69. [How Common Is Femoral Retroversion and How Is it Affected by Different Measurement Methods in Unilateral Slipped Capital Femoral Epiphysis?](#)  
Schmaranzer F, Kallini JR, Ferrer MG, Miller PE, Wylie JD, Kim YJ, Novais EN.  
Clin Orthop Relat Res. 2021 May 1;479(5):947-959. doi: 10.1097/CORR.0000000000001611.  
PMID: 33377759 Free PMC article.
70. [Surgical Treatment of Distal Radial Fractures with External Fixation Versus Volar Locking Plate: A Multicenter Randomized Controlled Trial.](#)  
Ludvigsen T, Matre K, Gudmundsdottir RS, Krukhaug Y, Dybvik EH, Fevang JM.  
J Bone Joint Surg Am. 2021 Mar 3;103(5):405-414. doi: 10.2106/JBJS.20.00275.  
PMID: 33369985 Clinical Trial.
71. [What Is the Association Among Epiphyseal Rotation, Translation, and the Morphology of the Epiphysis and Metaphysis in Slipped Capital Femoral Epiphysis?](#)  
Novais EN, Hosseinzadeh S, Emami SA, Maranhão DA, Kim YJ, Kiapour AM.  
Clin Orthop Relat Res. 2021 May 1;479(5):935-944. doi: 10.1097/CORR.0000000000001590.  
PMID: 33283994 Free PMC article.
72. [Does a History of Slipped Capital Femoral Epiphysis in Patients Undergoing Femoroacetabular Osteoplasty for Femoroacetabular Impingement Affect Outcomes Scores or Risk of Reoperation?](#)  
Sutton R, Yacovelli S, Vahedi H, Parvizi J.  
Clin Orthop Relat Res. 2021 May 1;479(5):1028-1036. doi: 10.1097/CORR.0000000000001576.  
PMID: 33231940 Free PMC article.
73. [Is Social Deprivation Associated with PROMIS Outcomes After Upper Extremity Fractures in Children?](#)  
Evans S, Okoroafor UC, Calfee RP.  
Clin Orthop Relat Res. 2021 Apr 1;479(4):826-834. doi: 10.1097/CORR.0000000000001571.

## Additional File 1

- PMID: 33196588 Free PMC article.
74. [Differences in Rupture Patterns and Associated Lesions Related to Traumatic Distal Triceps Tendon Rupture Between Outstretched Hand and Direct Injuries.](#)  
Lee JH, Ahn KB, Kwon KR, Kim KC, Rhyou IH.  
Clin Orthop Relat Res. 2021 Apr 1;479(4):781-789. doi: 10.1097/CORR.0000000000001550.  
PMID: 33181575 Free PMC article.
  75. [Hand Bone Age Radiography: Comparison Between Slot-scanning and Conventional Techniques.](#)  
Nguyen JC, Guariento A, Nicholson A, Nguyen MK, Gendler L, Ho-Fung V, Zhu X, Talwar D, Darge K, Flynn JM, Cahill PJ.  
J Pediatr Orthop. 2021 Feb 1;41(2):e167-e173. doi: 10.1097/BPO.0000000000001710.  
PMID: 33165269
  76. [Part-time Abduction Bracing in Infants With Residual Acetabular Dysplasia: Does Compliance Monitoring Support a Dose-dependent Relationship?](#)  
Swarup I, Talwar D, Sankar WN.  
J Pediatr Orthop. 2021 Feb 1;41(2):e125-e129. doi: 10.1097/BPO.0000000000001704.  
PMID: 33165268 Clinical Trial.
  77. [Quadriceps Strength Is Influenced by Skeletal Maturity in Adolescents Recovering From Anterior Cruciate Ligament Reconstruction.](#)  
Casp AJ, Bodkin SG, Kew ME, Noona SW, Lesevic M, Hart JM, Diduch D.  
J Pediatr Orthop. 2021 Feb 1;41(2):e141-e146. doi: 10.1097/BPO.0000000000001706.  
PMID: 33165267
  78. [What is the Optimal Surgical Method for Achieving Correction and Avoiding Neurological Complications in Pediatric High-grade Spondylolisthesis?](#)  
Rocos B, Strantzas S, Zeller R, Lewis S, Tan T, Lebel D.  
J Pediatr Orthop. 2021 Mar 1;41(3):e217-e225. doi: 10.1097/BPO.0000000000001707.  
PMID: 33165266
  79. [The Incidence of Posterior and Combined AP Shoulder Instability Treatment with Surgical Stabilization Is Higher in an Active Military Population than in the General Population: Findings from the US Naval Academy.](#)  
Yow BG, Wade SM, Bedrin MD, Rue JH, LeClere LE.  
Clin Orthop Relat Res. 2021 Apr 1;479(4):704-708. doi: 10.1097/CORR.0000000000001530.  
PMID: 33094964 Free PMC article.
  80. [Analysis of 280 Magnetically Controlled Growing Rod Lengthenings Comparing External Remote Control Readouts and Radiographic Measurements: Impact of Patient and Deformity Factors.](#)  
Arhewoh RE, Mo M, Luhmann SJ.  
J Pediatr Orthop. 2021 Feb 1;41(2):e105-e110. doi: 10.1097/BPO.0000000000001678.  
PMID: 33074922
  81. [Why Irrigate for the Same Contamination Rate: Wound Contamination in Pediatric Spinal Surgery Using Betadine Versus Saline.](#)  
Cohen LL, Schwend RM, Flynn JM, Hedequist DJ, Karlin LI, Emans JB, Snyder BD, Hresko MT, Anderson JT, Leamon J, Talwar D, Glotzbecker MP.  
J Pediatr Orthop. 2020 Nov/Dec;40(10):e994-e998. doi: 10.1097/BPO.0000000000001620.  
PMID: 33044376 Clinical Trial.
  82. [Self-reduction techniques taught via smartphone are effective for anterior shoulder dislocation: prospective randomized study.](#)  
Chechik O, Maman E, Kazum E, Grunstein A, Ben-Shabat D, Lin R, Efrima B, Factor S, Rotman D, Krespi R, Dolkart O, Rosenthal R.  
Knee Surg Sports Traumatol Arthrosc. 2021 Jul;29(7):2338-2341. doi: 10.1007/s00167-020-06310-z. Epub 2020 Oct 8.  
PMID: 33033846 Clinical Trial.

## Additional File 1

- 83.** [Two-stage anterior and posterior fusion versus one-stage posterior fusion in patients with Scheuermann's kyphosis.](#)  
McDonnell JM, Ahern DP, Lui DF, Yu H, Lehovsky J, Noordeen H, Molloy S, Butler JS, Gibson A. Bone Joint J. 2020 Oct;102-B(10):1368-1374. doi: 10.1302/0301-620X.102B10.BJJ-2020-0273.R3. PMID: 32993336
- 84.** [An exploratory randomized controlled trial comparing wood-composite and synthetic fibreglass splint systems for the immobilization of paediatric upper limb fractures.](#)  
Martynov I, Klink T, Slowik V, Stich R, Zimmermann P, Engel C, Lacher M, Boehm R. Bone Joint J. 2020 Oct;102-B(10):1405-1411. doi: 10.1302/0301-620X.102B10.BJJ-2020-0236.R3. PMID: 32993326 Clinical Trial.
- 85.** [Comparison of plaster-of-Paris casts and Woodcast splints for immobilization of the limb during serial manipulation and casting for idiopathic clubfoot in infants.](#)  
Singh KA, Shah H, Joseph B. Bone Joint J. 2020 Oct;102-B(10):1399-1404. doi: 10.1302/0301-620X.102B10.BJJ-2020-0181.R4. PMID: 32993325 Clinical Trial.
- 86.** [A Comparison of Casting Versus Splinting for Nonoperative Treatment of Pediatric Phalangeal Neck Fractures.](#)  
Liao JCY, Huan SKW, Tan RES, Lim JX, Chong AKS, Das De S. J Pediatr Orthop. 2021 Jan;41(1):e30-e35. doi: 10.1097/BPO.0000000000001687. PMID: 32991491
- 87.** [Short and long-arm fiberglass cast immobilization for displaced distal forearm fractures in children: a randomized controlled trial.](#)  
Seiler M, Heinz P, Callegari A, Dreher T, Staubli G, Aufdenblatten C. Int Orthop. 2021 Mar;45(3):759-768. doi: 10.1007/s00264-020-04800-w. Epub 2020 Sep 17. PMID: 32940750 Free PMC article. Clinical Trial.
- 88.** [Randomized Trial Comparing Preliminary Results of Radialization and Centralization Procedures in Bayne Types 3 and 4 Radial Longitudinal Deficiency.](#)  
Mittal S, Garg B, Mehta N, Kumar V, Kotwal P. J Pediatr Orthop. 2020 Oct;40(9):509-514. doi: 10.1097/BPO.0000000000001606. PMID: 32931691 Clinical Trial.
- 89.** [Quadruple Versus Double Flexible Intramedullary Nails to Treat Pediatric Distal-third Tibial Shaft Fractures: A Biomechanical Comparison.](#)  
Zubair A, Samuelson EM, Morris RP, Foreman M, Gagnon-Bartsch JA, Rosenfeld SB. J Pediatr Orthop. 2020 Oct;40(9):487-491. doi: 10.1097/BPO.0000000000001604. PMID: 32931690
- 90.** [Surgical Treatment of Femoroacetabular Impingement: Hip Arthroscopy Versus Surgical Hip Dislocation: A Propensity-Matched Analysis.](#)  
Nepple JJ, Zaltz I, Larson CM, Beaulé PE, Kim YJ, Millis MB, Sierra RJ, Clohisy JC; ANCHOR Group. J Bone Joint Surg Am. 2020 Nov 4;102(Suppl 2):51-58. doi: 10.2106/JBJS.20.00265. PMID: 32925230
- 91.** [Safely Reducing the Incidence of Contralateral Slipped Capital Femoral Epiphysis: Results of a Prospectively Implemented Prophylactic Fixation Protocol Using the Posterior Sloping Angle.](#)  
St George J, Genon M, Little DG. J Pediatr Orthop. 2021 Jan;41(1):e50-e54. doi: 10.1097/BPO.0000000000001669. PMID: 32868515 Clinical Trial.
- 92.** [Intravenous tranexamic acid reduces blood loss and transfusion requirements after periacetabular osteotomy.](#)  
Levack AE, McLawhorn AS, Dodwell E, DelPizzo K, Nguyen J, Sink E. Bone Joint J. 2020 Sep;102-B(9):1151-1157. doi: 10.1302/0301-620X.102B9.BJJ-2019-1777.R1. PMID: 32862676 Clinical Trial.

## Additional File 1

93. [Comparison of Iliac and Femoral Autograft Practices in Pemberton Pelvic Osteotomy.](#)  
Bulut M, Azboy I, Ozkul E, Karakurt L.  
J Pediatr Orthop. 2021 Jan;41(1):46-50. doi: 10.1097/BPO.0000000000001665.  
PMID: 32804869 Clinical Trial.
94. [Improving Safety and Efficacy in the Surgical Management of Low-tone Neuromuscular Scoliosis: Integrated Approach With a 2-attending Surgeon Operative Team and Modified Anesthesia Protocol.](#)  
Ozhan MO, Bakircioglu S, Bekmez S, Olgun ZD, Süzer A, Demirkiran HG, Yazici M.  
J Pediatr Orthop. 2021 Jan;41(1):e1-e6. doi: 10.1097/BPO.0000000000001658.  
PMID: 32804863
95. [Delays in Obtaining Knee MRI in Pediatric Sports Medicine: Impact of Insurance Type.](#)  
Beck JJ, West N, Shaw KG, Jackson N, Bowen RE.  
J Pediatr Orthop. 2020 Nov/Dec;40(10):e952-e957. doi: 10.1097/BPO.0000000000001653.  
PMID: 32796210 Free PMC article.
96. [Closed Vs. Open Reduction/Salter Innominate Osteotomy for Developmental Hip Dislocation After Age 18 Months: Comparative Survival at 45-Year Follow-up.](#)  
Scott EJ, Dolan LA, Weinstein SL.  
J Bone Joint Surg Am. 2020 Aug 5;102(15):1351-1357. doi: 10.2106/JBJS.19.01278.  
PMID: 32769602
97. [Characteristics and Hospital Costs of Spica Cast Treatment of Non-accidental-related Diaphyseal Femoral Fractures in Children Before Walking Age.](#)  
Magee LC, Mahmoud MAH, Baldwin K, Talwar D, Gandhi JS, Arkader A.  
J Pediatr Orthop. 2020 Nov/Dec;40(10):e932-e935. doi: 10.1097/BPO.0000000000001577.  
PMID: 32740177
98. [Treatment of femoral fractures in children aged two to six.](#)  
Gordon JE, Anderson JT, Schoenecker PL, Dobbs MB, Luhmann SJ, Hoernschemeyer DG.  
Bone Joint J. 2020 Aug;102-B(8):1056-1061. doi: 10.1302/0301-620X.102B8.BJJ-2019-1060.R3.  
PMID: 32731819
99. [Arthroscopic reduction and internal fixation \(ARIF\) versus open reduction internal fixation \(ORIF\) to elucidate the difference for tibial side PCL avulsion fixation: a randomized controlled trial \(RCT\).](#)  
Sundararajan SR, Joseph JB, Ramakanth R, Jha AK, Rajasekaran S.  
Knee Surg Sports Traumatol Arthrosc. 2021 Apr;29(4):1251-1257. doi: 10.1007/s00167-020-06144-9. Epub 2020 Jul 25.  
PMID: 32712683 Clinical Trial.
100. [Evaluation of containment measures' effect on orthopaedic trauma surgery during the COVID-19 pandemic: a retrospective comparison between 2019 and 2020.](#)  
Druel T, Andeol Q, Rongieras F, Bertani A, Bordes M, Alvernhe A.  
Int Orthop. 2020 Nov;44(11):2229-2234. doi: 10.1007/s00264-020-04712-9. Epub 2020 Jul 21.  
PMID: 32696333 Free PMC article.
101. [Is Surgical Resection of the Primary Site Associated with an Improved Overall Survival for Patients with Primary Malignant Bone Tumors Who Have Metastatic Disease at Presentation?](#)  
Malik AT, Alexander JH, Mayerson JL, Khan SN, Scharschmidt TJ.  
Clin Orthop Relat Res. 2020 Oct;478(10):2284-2295. doi: 10.1097/CORR.0000000000001361.  
PMID: 32667758 Free PMC article.
102. [Anterolateral ligament reconstruction improves the clinical and functional outcomes of anterior cruciate ligament reconstruction in athletes.](#)  
Hamido F, Habiba AA, Marwan Y, Soliman ASI, Elkhadrawe TA, Morsi MG, Shoaeb W, Nagi A.  
Knee Surg Sports Traumatol Arthrosc. 2021 Apr;29(4):1173-1180. doi: 10.1007/s00167-020-06119-w. Epub 2020 Jul 2.  
PMID: 32617609 Clinical Trial.

## Additional File 1

- 103.** [Comparative study of the use of Paediatric Quality Of Life Inventory 4.0 generic core scales in paediatric patients with spine and limb pathologies.](#)  
Cheung PWH, Wong CKH, Cheung JPY.  
Bone Joint J. 2020 Jul;102-B(7):890-898. doi: 10.1302/0301-620X.102B7.BJJ-2019-1766.R2.  
PMID: 32600144
- 104.** [Treatment for Clubfoot: Stockinette Versus Webril Cast Padding in the Ponseti Method.](#)  
Marien M, Abouassaly M, Jarvis J, Smit K, Kontio K.  
J Pediatr Orthop. 2020 Nov/Dec;40(10):e947-e951. doi: 10.1097/BPO.0000000000001617.  
PMID: 32569033 Clinical Trial.
- 105.** [Is Growth-friendly Surgical Treatment Superior to One-stage Posterior Spinal Fusion in 9- to 11-year-old Children with Congenital Scoliosis?](#)  
Xu L, Sun X, Du C, Zhou Q, Shi B, Zhu Z, Qiu Y.  
Clin Orthop Relat Res. 2020 Oct;478(10):2375-2386. doi: 10.1097/CORR.0000000000001377.  
PMID: 32568886 Free PMC article.
- 106.** [Effect of NSAID Use on Bone Healing in Pediatric Fractures: A Preliminary, Prospective, Randomized, Blinded Study.](#)  
Nuelle JAV, Coe KM, Oliver HA, Cook JL, Hoernschemeyer DG, Gupta SK.  
J Pediatr Orthop. 2020 Sep;40(8):e683-e689. doi: 10.1097/BPO.0000000000001603.  
PMID: 32555047 Clinical Trial.
- 107.** [Lengthening of the Humerus Using a Motorized Lengthening Nail: A Retrospective Comparative Series.](#)  
Morrison SG, Georgiadis AG, Dahl MT.  
J Pediatr Orthop. 2020 Jul;40(6):e479-e486. doi: 10.1097/BPO.0000000000001453.  
PMID: 32501920
- 108.** [Effect of Intravenous Aminocaproic Acid on Blood Loss and Transfusion Requirements After Bilateral Varus Rotational Osteotomy: A Double-blind, Placebo-controlled Randomized Trial.](#)  
Swarup I, Nguyen J, Edmonds C, Dodwell E, Scher D.  
J Pediatr Orthop. 2020 Jul;40(6):e454-e459. doi: 10.1097/BPO.0000000000001480.  
PMID: 32501914 Free PMC article. Clinical Trial.
- 109.** [Does Shorter Time to Treatment of Pediatric Femur Shaft Fractures Impact Clinical Outcomes?](#)  
Graubeger J, O'Byrne M, Stans AA, Shaughnessy WJ, Larson AN, Milbrandt TA.  
J Pediatr Orthop. 2020 Jul;40(6):e435-e439. doi: 10.1097/BPO.0000000000001544.  
PMID: 32501907 Free PMC article.
- 110.** [The femoral deformity in Blount's disease: a comparative study of infantile, juvenile and adolescent Blount's disease.](#)  
Firth GB, Ngcakani A, Ramguthy Y, Izu A, Robertson A.  
J Pediatr Orthop B. 2020 Jul;29(4):317-322. doi: 10.1097/BPB.0000000000000722.  
PMID: 32479715
- 111.** [Comparison of Staged Versus Same-day Bilateral Hip Surgery in Nonambulatory Children With Cerebral Palsy.](#)  
Louer CR, Nunez J, Bomar JD, Fischer-Colbrie ME, Chambers HG, Upasani VV.  
J Pediatr Orthop. 2020 Nov/Dec;40(10):608-614. doi: 10.1097/BPO.0000000000001595.  
PMID: 32453016
- 112.** [What Proportion of Patients Undergoing Bernese Periacetabular Osteotomy Experience Nonunion, and What Factors are Associated with Nonunion?](#)  
Selberg CM, Davila-Parrilla AD, Williams KA, Kim YJ, Millis MB, Novais EN.  
Clin Orthop Relat Res. 2020 Jul;478(7):1648-1656. doi: 10.1097/CORR.0000000000001296.  
PMID: 32452931 Free PMC article.
- 113.** [Anterior cruciate ligament reconstruction with bone-patellar tendon-bone graft is associated with higher and earlier return to sports as compared to hamstring tendon graft.](#)

## Additional File 1

- Gupta R, Kapoor A, Soni A, Khatri S, Masih GD.  
Knee Surg Sports Traumatol Arthrosc. 2020 Nov;28(11):3659-3665. doi: 10.1007/s00167-020-06074-6. Epub 2020 May 24.  
PMID: 32448944
- 114.** [Distraction-to-stall Versus Targeted Distraction in Magnetically Controlled Growing Rods.](#)  
Dragsted C, Fruergaard S, Jain MJ, Deveza L, Heydemann J, Ohrt-Nissen S, Andersen T, Gehrchen M, Dahl B; Texas Children's Hospital Spine Study Group.  
J Pediatr Orthop. 2020 Oct;40(9):e811-e817. doi: 10.1097/BPO.0000000000001585.  
PMID: 32398627
- 115.** [Intraoperative Prone Radiographs During Scheuermann Kyphosis Correction Closely Estimate Standing Thoracic and Lumbar Parameters at 2 Years.](#)  
Greenhill DA, Poppino KF, Jo CH, Sucato DJ.  
J Pediatr Orthop. 2020 Nov/Dec;40(10):581-586. doi: 10.1097/BPO.0000000000001581.  
PMID: 32379246
- 116.** [Which Acetabular Landmarks are the Most Useful for Measuring the Acetabular Index and Center-edge Angle in Developmental Dysplasia of the Hip? A Comparison of Two Methods.](#)  
Shin CH, Yang E, Lim C, Yoo WJ, Choi IH, Cho TJ.  
Clin Orthop Relat Res. 2020 Sep;478(9):2120-2131. doi: 10.1097/CORR.0000000000001289.  
PMID: 32379138 Free PMC article.
- 117.** [Anterior Spinal Growth Modulation in Skeletally Immature Patients with Idiopathic Scoliosis: A Comparison with Posterior Spinal Fusion at 2 to 5 Years Postoperatively.](#)  
Newton PO, Bartley CE, Bastrom TP, Kluck DG, Saito W, Yaszay B.  
J Bone Joint Surg Am. 2020 May 6;102(9):769-777. doi: 10.2106/JBJS.19.01176.  
PMID: 32379117
- 118.** [Ramosozumab in Skeletally Mature Adults with a Fresh Unilateral Tibial Diaphyseal Fracture: A Randomized Phase-2 Study.](#)  
Bhandari M, Schemitsch EH, Karachalios T, Sancheti P, Poolman RW, Caminis J, Daizadeh N, Dent-Acosta RE, Egbuna O, Chines A, Miclau T.  
J Bone Joint Surg Am. 2020 Aug 19;102(16):1416-1426. doi: 10.2106/JBJS.19.01008.  
PMID: 32358413 Clinical Trial.
- 119.** [Evolution of concentricity after closed reduction in developmental dysplasia of the hip.](#)  
Zhou W, Sankar WN, Zhang F, Li L, Zhang L, Zhao Q.  
Bone Joint J. 2020 May;102-B(5):618-626. doi: 10.1302/0301-620X.102B5.BJJ-2019-1496.R1.  
PMID: 32349601 Clinical Trial.
- 120.** [Comparison of Early Definitive Fusion and Traditional Growing Rods in Early-onset Dystrophic Scoliosis in Neurofibromatosis Type 1: A Preliminary Report.](#)  
Tauchi R, Kawakami N, Suzuki T, Uno K, Yamaguchi T, Yanagida H, Yamamoto T, Murakami H, Demura S, Kotani T; NPO Japan Spinal Deformity Institute.  
J Pediatr Orthop. 2020 Nov/Dec;40(10):569-574. doi: 10.1097/BPO.0000000000001579.  
PMID: 32341243
- 121.** [Prospective Comparison of Patient-selected Operative Versus Nonoperative Treatment of Scheuermann Kyphosis.](#)  
Green C, Brown K, Caine H, Dieckmann RJ, Rathjen KE.  
J Pediatr Orthop. 2020 Sep;40(8):e716-e719. doi: 10.1097/BPO.0000000000001576.  
PMID: 32341242
- 122.** [The management of emergency spinal surgery during the COVID-19 pandemic in Italy.](#)  
Giorgi PD, Villa F, Gallazzi E, Debernardi A, Schirò GR, Crisà FM, Talamonti G, D'Aliberti G.  
Bone Joint J. 2020 Jun;102-B(6):671-676. doi: 10.1302/0301-620X.102B6.BJJ-2020-0537. Epub 2020 Apr 23.  
PMID: 32323563 Free PMC article. Clinical Trial.

## Additional File 1

- 123.** [Comparing iatrogenic radial nerve lesions in humeral shaft fractures treated with helical or straight PHILOS plates: a 10-year retrospective cohort study of 62 cases.](#)  
Da Silva T, Rummel F, Knop C, Merkle T.  
Arch Orthop Trauma Surg. 2020 Dec;140(12):1931-1937. doi: 10.1007/s00402-020-03438-y. Epub 2020 Apr 6.  
PMID: 32253549
- 124.** [ACL deficiency influences medio-lateral tibial alignment and knee varus-valgus during in vivo activities.](#)  
Agostinone P, Di Paolo S, Grassi A, Pinelli E, Bontempi M, Bragonzoni L, Zaffagnini S.  
Knee Surg Sports Traumatol Arthrosc. 2021 Feb;29(2):389-397. doi: 10.1007/s00167-020-05979-6. Epub 2020 Apr 6.  
PMID: 32253481 Clinical Trial.
- 125.** [Anterior knee translation measurements after ACL reconstruction are influenced by the type of laximeter used.](#)  
Klasan A, Putnis SE, Kandhari V, Oshima T, Parker DA.  
Knee Surg Sports Traumatol Arthrosc. 2020 Nov;28(11):3639-3646. doi: 10.1007/s00167-020-05950-5. Epub 2020 Apr 2.  
PMID: 32240345
- 126.** [No difference in revision rates between anteromedial portal and transtibial drilling of the femoral graft tunnel in primary anterior cruciate ligament reconstruction: early results from the New Zealand ACL Registry.](#)  
Rahardja R, Zhu M, Love H, Clatworthy MG, Monk AP, Young SW.  
Knee Surg Sports Traumatol Arthrosc. 2020 Nov;28(11):3631-3638. doi: 10.1007/s00167-020-05959-w. Epub 2020 Apr 1.  
PMID: 32239269
- 127.** [Utilization of Telemedicine Virtual Visits in Pediatric Spinal Deformity Patients: A Comparison of Feasibility and Patient Satisfaction at a Large Academic Center.](#)  
Sultan AA, Acuña AJ, Samuel LT, Rabin JM, Grits D, Gurd DP, Kuivila TE, Goodwin RC.  
J Pediatr Orthop. 2020 Sep;40(8):e712-e715. doi: 10.1097/BPO.0000000000001553.  
PMID: 32235192
- 128.** [Bipolar hemiarthroplasty versus total hip arthroplasty in allograft-prosthesis composite reconstruction of the proximal femur following primary bone tumour resection.](#)  
Jamshidi K, Mirkazemi M, Gharedaghi M, Izanloo A, Mohammadpour M, Pisoudeh K, Bagherifard A, Mirzaei A.  
Bone Joint J. 2020 Apr;102-B(4):524-529. doi: 10.1302/0301-620X.102B4.BJJ-2019-0925.R2.  
PMID: 32228068
- 129.** [Medial patellofemoral ligament reconstruction with allograft versus autograft tissue results in similar recurrent dislocation risk and patient-reported outcomes.](#)  
Flanigan DC, Shemory S, Lundy N, Stitgen M, Long JM, Magnussen RA.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2099-2104. doi: 10.1007/s00167-020-05920-x. Epub 2020 Mar 17.  
PMID: 32185451
- 130.** [The space available for the anterior cruciate ligament in the intercondylar notch is less in patients with ACL injury.](#)  
Oshima T, Putnis S, Grasso S, Parker DA.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2105-2115. doi: 10.1007/s00167-020-05921-w. Epub 2020 Mar 10.  
PMID: 32157364
- 131.** [Trochleoplasty improves knee flexion angles and quadriceps function during gait only if performed bilaterally.](#)  
Ammann E, Meier RL, Rutz E, Vavken P, Studer K, Camathias C.

## Additional File 1

- Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2067-2076. doi: 10.1007/s00167-020-05906-9. Epub 2020 Mar 4.  
PMID: 32130444
- 132.** [Recurrent patellar dislocations in adolescents result in decreased knee flexion during the entire gait cycle.](#)  
Camathias C, Ammann E, Meier RL, Rutz E, Vavken P, Studer K.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2053-2066. doi: 10.1007/s00167-020-05911-y. Epub 2020 Mar 4.  
PMID: 32130443
- 133.** [Intraoperative Issues and Clinical and Radiographic Outcomes of Femur Fractures Treated With Flexible Nails: A Comparison of Cases Utilizing Skeletal Traction and a Traction Table to Cases Using Manual Traction Only.](#)  
Canavese F, Alberghina F, Cravino M, Paonessa M, Dimeglio A, Andreacchio A.  
J Pediatr Orthop. 2020 Sep;40(8):e676-e682. doi: 10.1097/BPO.0000000000001538.  
PMID: 32118797
- 134.** [Deformity correction in thoracic adolescent idiopathic scoliosis.](#)  
Presenti S, Lafage R, Henry B, Kim HJ, Bolzinger M, Elysée J, Cunningham M, Choufani E, Lafage V, Blanco J, Jouve JL, Widmann R.  
Bone Joint J. 2020 Mar;102-B(3):376-382. doi: 10.1302/0301-620X.102B3.BJJ-2019-0993.R1.  
PMID: 32114809
- 135.** [Hip displacement and dislocation in a total population of children with cerebral palsy in Scotland.](#)  
Wordie SJ, Robb JE, Häggglund G, Bugler KE, Gaston MS.  
Bone Joint J. 2020 Mar;102-B(3):383-387. doi: 10.1302/0301-620X.102B3.BJJ-2019-1203.R1.  
PMID: 32114804
- 136.** [Pediatric Medial Epicondyle Fracture Management: A Systematic Review.](#)  
Pezzutti D, Lin JS, Singh S, Rowan M, Balch Samora J.  
J Pediatr Orthop. 2020 Sep;40(8):e697-e702. doi: 10.1097/BPO.0000000000001532.  
PMID: 32080057
- 137.** [Time interval affects physical activity scores: a comparison of the Marx Activity Rating Scale and the Hospital for Special Surgery Pediatric Functional Activity Brief Scale.](#)  
Marom N, Xiang W, Heath M, Boyle C, Fabricant PD, Marx RG.  
Knee Surg Sports Traumatol Arthrosc. 2020 Aug;28(8):2619-2625. doi: 10.1007/s00167-020-05895-9. Epub 2020 Feb 19.  
PMID: 32076731
- 138.** [Can an Integrative Care Approach Improve Physical Function Trajectories after Orthopaedic Trauma? A Randomized Controlled Trial.](#)  
Zdziarski-Horodyski L, Vasilopoulos T, Horodyski M, Hagen JE, Sadasivan KS, Sharififar S, Patrick M, Guenther R, Vincent HK.  
Clin Orthop Relat Res. 2020 Apr;478(4):792-804. doi: 10.1097/CORR.0000000000001140.  
PMID: 32032087 Free PMC article. Clinical Trial.
- 139.** [Biomechanical and Clinical Comparative Study of the New Elastic Stable Intramedullary Nailing "MJ-FLEX Orthofix".](#)  
Denis D, Maucourt-Boulch D, Suchier Y, Mamadou TB, Metaizeau JD.  
J Pediatr Orthop. 2020 Mar;40(3):149-155. doi: 10.1097/BPO.0000000000001206.  
PMID: 32028477
- 140.** [Lower incidence of post-operative septic arthritis following revision anterior cruciate ligament reconstruction with quadriceps tendon compared to hamstring tendons.](#)  
Schuster P, Schlumberger M, Mayer P, Raoulis VA, Oremek D, Eichinger M, Richter J.  
Knee Surg Sports Traumatol Arthrosc. 2020 Aug;28(8):2572-2577. doi: 10.1007/s00167-020-05878-w. Epub 2020 Feb 4.  
PMID: 32020252



## Additional File 1

- 141.** [Should instrumented spinal fusion in nonambulatory children with neuromuscular scoliosis be extended to L5 or the pelvis?](#)  
Tøndevold N, Lastikka M, Andersen T, Gehrchen M, Helenius I.  
Bone Joint J. 2020 Feb;102-B(2):261-267. doi: 10.1302/0301-620X.102B2.BJJ-2019-0772.R2.  
PMID: 32009441
- 142.** [Bone health in adolescents with idiopathic scoliosis.](#)  
Diarbakerli E, Savvides P, Wihlborg A, Abbott A, Bergström I, Gerdhem P.  
Bone Joint J. 2020 Feb;102-B(2):268-272. doi: 10.1302/0301-620X.102B2.BJJ-2019-1016.R1.  
PMID: 32009439
- 143.** [What Is the Accuracy and Reliability of the Peritubercle Lucency Sign on Radiographs for Early Diagnosis of Slipped Capital Femoral Epiphysis Compared With MRI as the Gold Standard?](#)  
Maranho DA, Bixby SD, Miller PE, Hosseinzadeh S, George M, Kim YJ, Novais EN.  
Clin Orthop Relat Res. 2020 May;478(5):1049-1059. doi: 10.1097/CORR.0000000000001136.  
PMID: 31977443 Free PMC article.
- 144.** [Are Patient and Surgeon Expectations after ACL Reconstruction Realistic?](#)  
Weekes D, Campbell RE, Shi WJ, Ciccotti M, Salvo J, Cohen S, Tucker B, Pepe M, Freedman K, Tjoumakaris F.  
Clin Orthop Relat Res. 2020 Mar;478(3):619-628. doi: 10.1097/CORR.0000000000001082.  
PMID: 31977430 Free PMC article.
- 145.** [Predictors of Open Reduction in Pediatric Femur Fractures Treated With Flexible Nails.](#)  
Heffernan MJ, Shelton W, Song B, Lucak TJ, Leonardi C, Kadhim M.  
J Pediatr Orthop. 2020 Aug;40(7):e566-e571. doi: 10.1097/BPO.0000000000001511.  
PMID: 31972726
- 146.** [MRI Is Better Than CT Scan for Detection of Structural Pathologies After Traumatic Posterior Hip Dislocations in Children and Adolescents.](#)  
Thanacharoenpanich S, Bixby S, Breen MA, Kim YJ.  
J Pediatr Orthop. 2020 Feb;40(2):86-92. doi: 10.1097/BPO.0000000000001127.  
PMID: 31923168
- 147.** [Comparison of total cost and outcomes between single-stage open reduction and Pemberton periacetabular osteotomy operation and two separate consecutive operations in treatment of bilateral developmental hip dysplasia in children at walking age.](#)  
Yılar S, Topal M, Zencirli K, Köse M, Ezirmik N.  
J Pediatr Orthop B. 2020 May;29(3):256-260. doi: 10.1097/BPB.0000000000000714.  
PMID: 31923136
- 148.** [No difference between single and staged posterolateral corner surgical procedures in the multiligament injured/dislocated knee.](#)  
Freychet B, Kennedy NI, Sanders TL, Levy NM, Leland DP, Krych AJ, Stuart MJ, Levy BA.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2170-2176. doi: 10.1007/s00167-019-05759-x. Epub 2020 Jan 7.  
PMID: 31912165
- 149.** [Safety and efficacy of matrix-associated autologous chondrocyte implantation with spheroid technology is independent of spheroid dose after 4 years.](#)  
Niemeyer P, Laute V, Zinser W, John T, Becher C, Diehl P, Kolombe T, Fay J, Siebold R, Fickert S.  
Knee Surg Sports Traumatol Arthrosc. 2020 Apr;28(4):1130-1143. doi: 10.1007/s00167-019-05786-8. Epub 2020 Jan 2.  
PMID: 31897548 Clinical Trial.
- 150.** [Primary Arthroscopic Stabilization for a First-Time Anterior Dislocation of the Shoulder: Long-Term Follow-up of a Randomized, Double-Blinded Trial.](#)  
Yapp LZ, Nicholson JA, Robinson CM.  
J Bone Joint Surg Am. 2020 Mar 18;102(6):460-467. doi: 10.2106/JBJS.19.00858.  
PMID: 31895236 Clinical Trial.

## Additional File 1

- 151.** [Woodcast versus standard casting material for the immobilization of nonoperatively treated distal radial fractures.](#)  
Gwilym S, Sansom L, Rombach I, Dutton SJ, Achten J, Costa ML.  
Bone Joint J. 2020 Jan;102-B(1):48-54. doi: 10.1302/0301-620X.102B1.BJJ-2019-0243.R2.  
PMID: 31888371 Clinical Trial.
- 152.** [The Oswestry-Bristol Classification.](#)  
Sharma N, Brown A, Bouras T, Kuiper JH, Eldridge J, Barnett A.  
Bone Joint J. 2020 Jan;102-B(1):102-107. doi: 10.1302/0301-620X.102B1.BJJ-2019-0366.R3.  
PMID: 31888364
- 153.** [Mobile Phone Administration of Hip-Specific Patient-Reported Outcome Instruments Correlates Highly With In-office Administration.](#)  
Scott EJ, Anthony CA, Rooney P, Lynch TS, Willey MC, Westermann RW.  
J Am Acad Orthop Surg. 2020 Jan 1;28(1):e41-e46. doi: 10.5435/JAAOS-D-18-00708.  
PMID: 31860543
- 154.** [Comparison of surgical and nonsurgical containment methods for patients with Legg-Calvé-Perthes disease of the onset ages between 6.0 and 8.0 years: Salter osteotomy versus a non-weight-bearing hip flexion-abduction brace.](#)  
Kaneko H, Kito H, Mishima K, Matsushita M, Hattori T, Noritake K, Ishiguro N, Yoshihashi Y.  
J Pediatr Orthop B. 2020 Nov;29(6):542-549. doi: 10.1097/BPB.0000000000000710.  
PMID: 31856043
- 155.** [Comparative Analysis of Mechanism-Associated 3-Dimensional Tibial Plateau Fracture Patterns.](#)  
Xie X, Zhan Y, Wang Y, Lucas JF, Zhang Y, Luo C.  
J Bone Joint Surg Am. 2020 Mar 4;102(5):410-418. doi: 10.2106/JBJS.19.00485.  
PMID: 31855868
- 156.** [Latarjet with cortical button fixation is associated with an increase of the risk of recurrent dislocation compared to screw fixation.](#)  
Hardy A, Sabatier V, Schoch B, Vigan M, Werthel JD; Study Investigators.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2354-2360. doi: 10.1007/s00167-019-05815-6. Epub 2019 Dec 17.  
PMID: 31848650 Free PMC article.
- 157.** [Comparison of Hip and Knee Arthroplasty Rates of Individuals With and Without Prader-Willi Syndrome.](#)  
van Bosse HJP, Gantz MG, Ong KL, Cox JB.  
J Pediatr Orthop. 2020 May/Jun;40(5):e362-e366. doi: 10.1097/BPO.0000000000001490.  
PMID: 31834241
- 158.** [Radius and ulna locking intramedullary nails are safe and reliable after adolescent forearm fractures: a case-controlled study in adolescents.](#)  
Özcan Ç, Taylan Öz T, Türkmen İ.  
J Pediatr Orthop B. 2020 Mar;29(2):164-171. doi: 10.1097/BPB.0000000000000703.  
PMID: 31821273
- 159.** [Better functional outcomes for ORIF in tibial eminence fracture treatment: a national comparative multicentric study of ORIF vs ARIF.](#)  
Pailhé R, Bauer T, Flecher X, Bonneville N, Roussignol X, Saragaglia D, Ehlinger M; SOFCOT.  
Knee Surg Sports Traumatol Arthrosc. 2020 Feb;28(2):653-657. doi: 10.1007/s00167-019-05785-9.  
Epub 2019 Dec 3.  
PMID: 31797020
- 160.** [A comparative study of pedobarography and ankle kinematics between children with idiopathic clubfoot after a soft tissue release procedure and controls.](#)  
Limpaphayom N, Tooptakong T, Osateerakun P.  
Int Orthop. 2020 Feb;44(2):319-327. doi: 10.1007/s00264-019-04447-2. Epub 2019 Dec 3.  
PMID: 31796992

## Additional File 1

- 161.** [Quadriceps tendon autograft ACL reconstructed subjects overshoot target knee extension angle during active proprioception testing.](#)  
Guney-Deniz H, Harput G, Kaya D, Nyland J, Doral MN.  
Knee Surg Sports Traumatol Arthrosc. 2020 Feb;28(2):645-652. doi: 10.1007/s00167-019-05795-7. Epub 2019 Nov 27.  
PMID: 31776624
- 162.** [Preemptive Pregabalin in Children and Adolescents Undergoing Posterior Instrumented Spinal Fusion: A Double-Blinded, Placebo-Controlled, Randomized Clinical Trial.](#)  
Helenius LL, Oksanen H, Lastikka M, Pajulo O, Löyttyniemi E, Manner T, Helenius IJ.  
J Bone Joint Surg Am. 2020 Feb 5;102(3):205-212. doi: 10.2106/JBJS.19.00650.  
PMID: 31770296 Clinical Trial.
- 163.** [Modified split tendon transfer of posterior tibialis muscle in the treatment of spastic equinovarus foot deformity: long-term results and comparison with the standard procedure.](#)  
Aleksić M, Baščarević Z, Stevanović V, Rakočević J, Baljžović A, Čobeljić G.  
Int Orthop. 2020 Jan;44(1):155-160. doi: 10.1007/s00264-019-04443-6. Epub 2019 Nov 19.  
PMID: 31740994
- 164.** [Reconstruction of the Suprascapular Nerve in Brachial Plexus Birth Injury: A Comparison of Nerve Grafting and Nerve Transfers.](#)  
Manske MC, Kalish LA, Cornwall R, Peljovich AE, Bauer AS.  
J Bone Joint Surg Am. 2020 Feb 19;102(4):298-308. doi: 10.2106/JBJS.19.00627.  
PMID: 31725125
- 165.** [Improving the Diagnosis of Ipsilateral Femoral Neck and Shaft Fractures: A New Imaging Protocol.](#)  
Rogers NB, Hartline BE, Achor TS, Kumaravel M, Gary JL, Choo AM, Routt ML Jr, Munz JW, Warner SJ.  
J Bone Joint Surg Am. 2020 Feb 19;102(4):309-314. doi: 10.2106/JBJS.19.00568.  
PMID: 31725122
- 166.** [Isolated Trochanteric Descent and Greater Trochanteric Apophyseodesis Are Not Effective in the Treatment of Post-Perthes Deformity.](#)  
Haskel JD, Feder OI, Mijares J, Castañeda P.  
Clin Orthop Relat Res. 2020 Jan;478(1):169-175. doi: 10.1097/CORR.0000000000000990.  
PMID: 31725028 Free PMC article.
- 167.** [No superiority of dextrose injections over placebo injections for Osgood-Schlatter disease: a prospective randomized double-blind study.](#)  
Nakase J, Oshima T, Takata Y, Shimozaki K, Asai K, Tsuchiya H.  
Arch Orthop Trauma Surg. 2020 Feb;140(2):197-202. doi: 10.1007/s00402-019-03297-2. Epub 2019 Nov 11.  
PMID: 31713082 Clinical Trial.
- 168.** [Comparison of the Results of Primary Versus Repeat Hamstring Surgical Lengthening in Cerebral Palsy.](#)  
Morais Filho MC, Blumetti FC, Kawamura CM, Fujino MH, Matias MS, Lopes JAF.  
J Pediatr Orthop. 2020 May/Jun;40(5):e380-e384. doi: 10.1097/BPO.0000000000001464.  
PMID: 31688817
- 169.** [Effect of seasonal variation on the peak presentation of slipped capital femoral epiphysis. A comparison of children in Johannesburg, South Africa and London, UK.](#)  
Firth GB, Foster M, Pieterse C, Ramguthy Y, Izu A, Bacarese-Hamilton J, Ramachandran M.  
J Pediatr Orthop B. 2020 May;29(3):268-274. doi: 10.1097/BPB.0000000000000689.  
PMID: 31688335
- 170.** [Posterior cruciate ligament reconstruction for chronic lesions: clinical experience with hamstring versus ligament advanced reinforcement system as graft.](#)  
Saragaglia D, Francony F, Gaillot J, Pailhé R, Rubens-Duval B, Lateur G.  
Int Orthop. 2020 Jan;44(1):179-185. doi: 10.1007/s00264-019-04434-7. Epub 2019 Oct 31.

## Additional File 1

PMID: 31673741

- 171.** [Quadriceps tendon autograft for anterior cruciate ligament reconstruction is associated with high revision rates: results from the Danish Knee Ligament Registry.](#)

Lind M, Strauss MJ, Nielsen T, Engebretsen L.

Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2163-2169. doi: 10.1007/s00167-019-05751-5. Epub 2019 Oct 22.

PMID: 31641810

- 172.** [Anatomic femoral tunnel placement is difficult by the transtibial technique: comparison of three different femoral tunnel drilling techniques in double-bundle anterior cruciate ligament reconstructions.](#)

Nakamura K, Nakamura T, Horie M, Katagiri H, Otabe K, Nakagawa Y, Amemiya M, Sekiya I, Muneta T, Koga H.

Knee Surg Sports Traumatol Arthrosc. 2020 Feb;28(2):584-593. doi: 10.1007/s00167-019-05740-8. Epub 2019 Oct 14.

PMID: 31612263

- 173.** [Which Factors Are Associated with Local Control and Survival of Patients with Localized Pelvic Ewing's Sarcoma? A Retrospective Analysis of Data from the Euro-EWING99 Trial.](#)

Andreou D, Ranft A, Gosheger G, Timmermann B, Ladenstein R, Hartmann W, Bauer S, Baumhoer D, van den Berg H, Dijkstra PDS, Dürr HR, Gelderblom H, Harges J, Hjorth L, Kreyer J, Kruseova J, Leithner A, Scobioala S, Streitbürger A, Tunn PU, Wardelmann E, Windhager R, Jürgens H, Dirksen U; GPOH-Euro-EWING99 consortium.

Clin Orthop Relat Res. 2020 Feb;478(2):290-302. doi: 10.1097/CORR.0000000000000962.

PMID: 31580267 Free PMC article.

- 174.** [Prevention of severe knee injuries in men's elite football by implementing specific training modules.](#)

Krutsch W, Lehmann J, Jansen P, Angele P, Fellner B, Achenbach L, Krutsch V, Nerlich M, Alt V, Loose O.

Knee Surg Sports Traumatol Arthrosc. 2020 Feb;28(2):519-527. doi: 10.1007/s00167-019-05706-w. Epub 2019 Sep 20.

PMID: 31541292 Clinical Trial.

- 175.** [Comparison between the Pavlik harness and the Tübingen hip flexion splint for the early treatment of developmental dysplasia of the hip.](#)

Ran L, Chen H, Pan Y, Lin Q, Canavese F, Chen S.

J Pediatr Orthop B. 2020 Sep;29(5):424-430. doi: 10.1097/BPB.0000000000000667.

PMID: 31503108

- 176.** [Evolution of Hip Dysplasia in Pediatric Patients With Prader-Willi Syndrome Treated With Growth Hormone Early in Development.](#)

Laumonerie P, Tibbo ME, Ibnoukhatib A, Kerezoudis P, Diene G, Thevenin Lemoine C, Accadbled F, Sales de Gauzy J.

J Pediatr Orthop. 2020 May/Jun;40(5):e357-e361. doi: 10.1097/BPO.0000000000001443.

PMID: 31479030

- 177.** [Neither lateral patellar facet nor patellar size are altered in patellofemoral unstable patients: a comparative magnetic resonance imaging analysis.](#)

Otto A, Tscholl PM, Pääsuke R, Herbst E, Willinger L, Imhoff AB, Brucker PU.

Knee Surg Sports Traumatol Arthrosc. 2020 Apr;28(4):1064-1071. doi: 10.1007/s00167-019-05660-7. Epub 2019 Aug 27.

PMID: 31456062

- 178.** [Comparison of two different methods in preoperative planning of the amount of lengthening in Z achilloplasty technique.](#)

Ozyalvac ON, Akpınar E.

J Pediatr Orthop B. 2020 Jan;29(1):35-39. doi: 10.1097/BPB.0000000000000666.

PMID: 31425334

## Additional File 1

- 179.** [Inpatient Versus Outpatient Treatment of Gartland Type II Supracondylar Humerus Fractures: A Cost and Safety Comparison.](#)  
Makarewich CA, Stotts AK, Yoo M, Nelson RE, Rothberg DL.  
J Pediatr Orthop. 2020 May/Jun;40(5):211-217. doi: 10.1097/BPO.0000000000001442.  
PMID: 31415017 Free PMC article.
- 180.** [Re-revision anterior cruciate ligament reconstruction showed more laxity than revision anterior cruciate ligament reconstruction at a minimum 2-year follow-up.](#)  
Yoon KH, Kim JH, Kwon YB, Kim EJ, Kim SG.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jun;28(6):1909-1918. doi: 10.1007/s00167-019-05653-6. Epub 2019 Aug 5.  
PMID: 31384982
- 181.** [ACL reconstruction with adjustable-length loop cortical button fixation results in less tibial tunnel widening compared with interference screw fixation.](#)  
Mayr R, Smekal V, Koidl C, Coppola C, Eichinger M, Rudisch A, Kranewitter C, Attal R.  
Knee Surg Sports Traumatol Arthrosc. 2020 Apr;28(4):1036-1044. doi: 10.1007/s00167-019-05642-9. Epub 2019 Aug 1.  
PMID: 31372680 Clinical Trial.
- 182.** [Comparison of plate and screw constructs versus screws only for anterior distal femoral hemiepiphysiodesis in children.](#)  
Nazareth A, Gyorfı MJ, Rethlefsen SA, Wiseley B, Noonan K, Kay RM.  
J Pediatr Orthop B. 2020 Jan;29(1):53-61. doi: 10.1097/BPB.0000000000000661.  
PMID: 31361704
- 183.** [Dorsiflexion is more feasible than plantar flexion in ultrasound evaluation of the calcaneofibular ligament: a combination study of ultrasound and cadaver.](#)  
Hattori S, Nimura A, Koyama M, Tsutsumi M, Amaha K, Ohuchi H, Akita K.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jan;28(1):262-269. doi: 10.1007/s00167-019-05630-z. Epub 2019 Jul 20.  
PMID: 31327035 Clinical Trial.
- 184.** [Functional and radiological outcome in patients with acute Monteggia fracture treated surgically: a comparison between closed reduction and external fixation versus closed reduction and elastic stable intramedullary nailing.](#)  
Yuan Z, Xu H, Li Y, Li J, Liu Y, Canavese F.  
J Pediatr Orthop B. 2020 Sep;29(5):438-444. doi: 10.1097/BPB.0000000000000645.  
PMID: 31305359
- 185.** [Cost Analysis of Treating Pediatric Supracondylar Humerus Fractures in Community Hospitals Compared With a Tertiary Care Hospital.](#)  
Shasti M, Li TP, Case AL, Hariharan AR, Jauregui JJ, Abzug JM.  
J Am Acad Orthop Surg. 2020 May 1;28(9):377-382. doi: 10.5435/JAAOS-D-18-00585.  
PMID: 31305356
- 186.** [Short stems reproduce femoral offset better than standard stems in total hip arthroplasty: a case-control study.](#)  
Erivan R, Muller AS, Villatte G, Millerioux S, Mulliez A, Boisgard S, Descamps S.  
Int Orthop. 2020 Jan;44(1):45-51. doi: 10.1007/s00264-019-04355-5. Epub 2019 Jun 28.  
PMID: 31254017
- 187.** [Comparison of EOSQ-24 and SRS-22 Scores in Congenital Scoliosis: A Preliminary Study.](#)  
Li Y, Burke MC, Gagnier J, Caird MS, Farley FA.  
J Pediatr Orthop. 2020 Mar;40(3):e182-e185. doi: 10.1097/BPO.0000000000001412.  
PMID: 31157754
- 188.** [Utility of Follow-up Radiographs After Pin Removal in Supracondylar Humerus Fractures: A Retrospective Cohort Study.](#)  
Zusman NL, Barney NA, Halsey MF, Yang S.

## Additional File 1

J Am Acad Orthop Surg. 2020 Jan 15;28(2):e71-e76. doi: 10.5435/JAAOS-D-18-00415.  
PMID: 31149973

**189.** [Obese Children Have Different Forearm Fracture Characteristics Compared With Normal-weight Children.](#)

Li Y, James C, Byl N, Sessel J, Caird MS, Farley FA, Robbins C.  
J Pediatr Orthop. 2020 Feb;40(2):e127-e130. doi: 10.1097/BPO.0000000000001402.  
PMID: 31095010

**190.** [Patellar height measurements: Insall-Salvati ratio is most reliable method.](#)

Verhulst FV, van Sambeek JDP, Olthuis GS, van der Ree J, Koëter S.  
Knee Surg Sports Traumatol Arthrosc. 2020 Mar;28(3):869-875. doi: 10.1007/s00167-019-05531-1.  
Epub 2019 May 14.  
PMID: 31089790

**191.** [Effect of Side Struts on the Strength of Long Arm Plaster Splints: A Biomechanical Study.](#)

Thompson SF, McBride C, Conant SH, Moore MC, Lewis TR.  
J Pediatr Orthop. 2020 Feb;40(2):e122-e126. doi: 10.1097/BPO.0000000000001397.  
PMID: 31045629

**192.** [Hop tests can result in higher limb symmetry index values than isokinetic strength and leg press tests in patients following ACL reconstruction.](#)

Nagai T, Schilaty ND, Laskowski ER, Hewett TE.  
Knee Surg Sports Traumatol Arthrosc. 2020 Mar;28(3):816-822. doi: 10.1007/s00167-019-05513-3.  
Epub 2019 Apr 25.  
PMID: 31025059 Free PMC article. Clinical Trial.

**193.** [Lateral ligament reconstruction and augmented direct anatomical repair restore ligament laxity in patients suffering from chronic ankle instability up to 15 years from surgery.](#)

Ventura A, Legnani C, Corradini C, Borgo E.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jan;28(1):202-207. doi: 10.1007/s00167-018-5244-4.  
Epub 2018 Oct 30.  
PMID: 30377717

## Excluded Search Results

Items 1-100 ([Display the 100 citations in PubMed](#))

[Testing of an Ultrasound-Limited Imaging Protocol for Pavlik harness Supervision \(TULIPPS\) in developmental dysplasia of the hip: a randomized controlled trial.](#)

Behman AL, Bradley CS, Maddock CL, Sharma S, Kelley SP.  
Bone Joint J. 2022 Sep;104-B(9):1081-1088. doi: 10.1302/0301-620X.104B9.BJJ-2022-0350.R2.  
PMID: 36047018 Clinical Trial.

[Virtual Reality Reduces Fear and Anxiety During Pediatric Orthopaedic Cast Room Procedures: A Randomized Controlled Trial.](#)

Richey AE, Hastings KG, Karius A, Segovia NA, Caruso TJ, Frick S, Rodriguez S.  
J Pediatr Orthop. 2022 Nov-Dec 01;42(10):600-607. doi: 10.1097/BPO.0000000000002250. Epub 2022 Aug 30.  
PMID: 36040069 Clinical Trial.

[Outcomes of Intramedullary Nailing and External Fixation of Open Tibial Fractures: Three to Five-Year Follow-up of a Randomized Clinical Trial.](#)

Cortez A, Urva M, Haonga B, Donnelley CA, von Kaepler EP, Roberts HJ, Shearer DW, Morshed S.  
J Bone Joint Surg Am. 2022 Nov 2;104(21):1877-1885. doi: 10.2106/JBJS.22.00016. Epub 2022 Aug 17.  
PMID: 35980080 Clinical Trial.

[Implicit Racial Bias in Pediatric Orthopaedic Surgery.](#)

Guzek R, Goodbody CM, Jia L, Sabatini CS, Sankar WN, Williams BA, Shah AS.

## Additional File 1

J Pediatr Orthop. 2022 Aug 1;42(7):393-399. doi: 10.1097/BPO.0000000000002170. Epub 2022 May 9. PMID: 35522848 Clinical Trial.

[The Knee Injury and Osteoarthritis Outcome Score Does Not Have Adequate Structural Validity for Use With Young, Active Patients With ACL Tears.](#)

Marmura H, Tremblay PF, Getgood AMJ, Bryant DM.

Clin Orthop Relat Res. 2022 Jul 1;480(7):1342-1350. doi: 10.1097/CORR.0000000000002158. Epub 2022 Mar 2.

PMID: 35238805 Clinical Trial.

[Assessment of deep vein thrombosis using routine pre- and postoperative duplex Doppler ultrasound in patients with pelvic trauma : a prospective study.](#)

Cerbasi S, Bernasconi A, Balato G, Dimitri F, Zingaretti O, Orabona G, Pascarella R, Mariconda M.

Bone Joint J. 2022 Feb;104-B(2):283-289. doi: 10.1302/0301-620X.104B2.BJJ-2021-0764.R2.

PMID: 35094570 Clinical Trial.

[Posterior-only stabilization versus global reconstruction in thoracic and thoracolumbar spinal tuberculosis; a prospective randomized study.](#)

Ramakrishnan RK, Barma SD, Shetty AP, Viswanathan VK, Kanna RM, Rajasekaran S.

Int Orthop. 2022 Mar;46(3):597-603. doi: 10.1007/s00264-021-05296-8. Epub 2022 Jan 12.

PMID: 35020025 Clinical Trial.

[Local Anesthetic Injection Before Incision Decreases General Anesthesia Requirements in Pediatric Trigger Thumb Release: A Randomized Controlled Trial.](#)

Lin EE, Fazal FZ, Pearsall MF, Talwar D, Chang H, Shah AS.

J Pediatr Orthop. 2022 Mar 1;42(3):e285-e289. doi: 10.1097/BPO.0000000000002042.

PMID: 34967805 Clinical Trial.

[Impact of Cost Information on Parental Decision Making: A Randomized Clinical Trial Evaluating Cast Versus Splint Selection for Pediatric Distal Radius Buckle Fractures.](#)

Lawrence JTR, MacAlpine EM, Buczek MJ, Horn BD, Williams BA, Manning K, Shah AS.

J Pediatr Orthop. 2022 Jan 1;42(1):e15-e20. doi: 10.1097/BPO.0000000000001980.

PMID: 34889832 Clinical Trial.

[The modified Stulberg classification is a strong predictor of the radiological outcome 20 years after the diagnosis of Perthes' disease.](#)

Huhnstock S, Wiig O, Merckoll E, Svenningsen S, Terjesen T.

Bone Joint J. 2021 Dec;103-B(12):1815-1820. doi: 10.1302/0301-620X.103B12.BJJ-2021-0515.R1.

PMID: 34847712 Clinical Trial.

[Oral tranexamic acid for an additional 24 hours postoperatively versus a single preoperative intravenous dose for reducing blood loss in total knee arthroplasty: results of a randomized controlled trial \(TRAC-24\).](#)

Magill P, Hill JC, Bryce L, Martin U, Dorman A, Hogg R, Campbell C, Gardner E, McFarland M, Bell J, Benson G, Beverland D.

Bone Joint J. 2021 Oct;103-B(10):1595-1603. doi: 10.1302/0301-620X.103B10.BJJ-2020-2308.R1.

PMID: 34587808 Clinical Trial.

[Thromboembolic and bleeding complications following primary total knee arthroplasty : a Danish nationwide cohort study.](#)

Schelde AB, Petersen J, Jensen TB, Gromov K, Overgaard S, Olesen JB, Jimenez-Solem E.

Bone Joint J. 2021 Oct;103-B(10):1571-1577. doi: 10.1302/0301-620X.103B10.BJJ-2021-0023.R1.

PMID: 34587805

[What Are the Long-term Surgical Outcomes of Compressive Endoprosthetic Osseointegration of the Femur with a Minimum 10-year Follow-up Period?](#)

Groundland J, Brown JM, Monument M, Bernthal N, Jones KB, Randall RL.

## Additional File 1

Clin Orthop Relat Res. 2022 Mar 1;480(3):539-548. doi: 10.1097/CORR.0000000000001979.  
PMID: 34559734

[Does Local Zoledronate Applied to Pasteurized Bone Autografts Improve the Likelihood of Union of Graft-Host Junctions after Limb-sparing Surgery?](#)

Kiatisevi P, Sukanthanak B, Piakong P, Kittithamvongs P.  
Clin Orthop Relat Res. 2022 Jan 1;480(1):109-120. doi: 10.1097/CORR.0000000000001942.  
PMID: 34406138 Free PMC article.

[Radiographs of 366 removed limb-lengthening nails reveal differences in bone abnormalities between different nail types.](#)

Iobst CA, Frost MW, Rölfing JD, Rahbek O, Bafor A, Duncan M, Kold S.  
Bone Joint J. 2021 Nov;103-B(11):1731-1735. doi: 10.1302/0301-620X.103B.BJJ-2021-0549.R1. Epub 2021 Aug 20.  
PMID: 34414785

[Fewer Adverse Events Following Outpatient Compared with Inpatient Unicompartmental Knee Arthroplasty.](#)

Hur ES, Serino J, Bohl DD, Della Valle CJ, Gerlinger TL.  
J Bone Joint Surg Am. 2021 Nov 17;103(22):2096-2104. doi: 10.2106/JBJS.20.02157.  
PMID: 34398841

[Volar Plate Fixation Versus Cast Immobilization in Acceptably Reduced Intra-Articular Distal Radial Fractures: A Randomized Controlled Trial.](#)

Selles CA, Mulders MAM, Winkelhagen J, van Eerten PV, Goslings JC, Schep NWL; VIPAR Collaborators.  
J Bone Joint Surg Am. 2021 Nov 3;103(21):1963-1969. doi: 10.2106/JBJS.20.01344.  
PMID: 34314402 Clinical Trial.

[Capsular Repair During Hip Arthroscopy Demonstrates Restoration of Axial Distraction Resistance in an in Vivo Intraoperative Testing Model.](#)

O'Neill DC, Tomasevich KM, Mortensen AJ, Featherall J, Ohlsen SM, Aoki SK.  
J Bone Joint Surg Am. 2021 Nov 3;103(21):1977-1985. doi: 10.2106/JBJS.20.01932.  
PMID: 34314401 Clinical Trial.

[Cost Analysis of Volar Plate Fixation Versus Plaster Cast Immobilization for Intra-Articular Distal Radial Fractures.](#)

Selles CA, Mulders MAM, van Dieren S, Goslings JC, Schep NWL; VIPAR Collaborators.  
J Bone Joint Surg Am. 2021 Nov 3;103(21):1970-1976. doi: 10.2106/JBJS.20.01345.  
PMID: 34314400 Clinical Trial.

[Oral tranexamic acid for an additional 24 hours postoperatively versus a single preoperative intravenous dose for reducing blood loss in total hip arthroplasty: results of a randomized controlled trial \(TRAC-24\).](#)

Magill P, Hill JC, Bryce L, Martin U, Dorman A, Hogg R, Campbell C, Gardner E, McFarland M, Bell J, Benson G, Beverland D.  
Bone Joint J. 2021 Jul;103-B(7):1197-1205. doi: 10.1302/0301-620X.103B7.BJJ-2020-2309.R1.  
PMID: 34192922 Clinical Trial.

[Long-term outcomes of curved intertrochanteric varus osteotomy combined with bone impaction grafting for non-traumatic osteonecrosis of the femoral head.](#)

Osawa Y, Seki T, Okura T, Takegami Y, Ishiguro N, Hasegawa Y.  
Bone Joint J. 2021 Apr;103-B(4):665-671. doi: 10.1302/0301-620X.103B4.BJJ-2020-1107.R1.  
PMID: 33789486 Free PMC article.

[Neither operative nor nonoperative approach is superior for treating displaced midshaft clavicle fractures: a partially blinded randomized controlled clinical trial.](#)

Ban I, Kristensen MT, Barfod KW, Eschen J, Kallemose T, Troelsen A.



## Additional File 1

Bone Joint J. 2021 Apr;103-B(4):762-768. doi: 10.1302/0301-620X.103B4.BJJ-2020-1636.R1.  
PMID: 33789482 Clinical Trial.

[Quadriceps and hamstring tendon autografts in ACL reconstruction yield comparably good results in a prospective, randomized controlled trial.](#)

Horstmann H, Petri M, Tegtbur U, Felmet G, Krettek C, Jagodzinski M.

Arch Orthop Trauma Surg. 2022 Feb;142(2):281-289. doi: 10.1007/s00402-021-03862-8. Epub 2021 Mar 19.

PMID: 33742222 Free PMC article. Clinical Trial.

[Squeaking Is Common and Increases Over Time Among Patients With Long-term Follow-up After Ceramic-on-ceramic THA.](#)

Taniguchi K, Quacinella M, Barlow B.

Clin Orthop Relat Res. 2021 Apr 1;479(4):736-744. doi: 10.1097/CORR.0000000000001472.

PMID: 33724977 Free PMC article.

[Contemporary Outpatient Arthroplasty Is Safe Compared with Inpatient Surgery: A Propensity Score-Matched Analysis of 574,375 Procedures.](#)

Lan RH, Samuel LT, Grits D, Kamath AF.

J Bone Joint Surg Am. 2021 Apr 7;103(7):593-600. doi: 10.2106/JBJS.20.01307.

PMID: 33646984

[Does total hip arthroplasty have a higher risk of failure in patients who undergo lumbar spinal fusion?](#)

Di Martino A, Bordini B, Ancarani C, Viceconti M, Faldini C.

Bone Joint J. 2021 Mar;103-B(3):486-491. doi: 10.1302/0301-620X.103B3.BJJ-2020-1209.R1.

PMID: 33641423

[What Is the Comparative Ability of 18F-FDG PET/CT, 99mTc-MDP Skeletal Scintigraphy, and Whole-body MRI as a Staging Investigation to Detect Skeletal Metastases in Patients with Osteosarcoma and Ewing Sarcoma?](#)

Aryal A, Kumar VS, Shamim SA, Gamanagatti S, Khan SA.

Clin Orthop Relat Res. 2021 Aug 1;479(8):1768-1779. doi: 10.1097/CORR.0000000000001681.

PMID: 33635285 Free PMC article.

[The PINS Trial: a prospective randomized clinical trial comparing a traditional versus an emollient skincare regimen for the care of pin-sites in patients with circular frames.](#)

Ferguson D, Harwood P, Allgar V, Roy A, Foster P, Taylor M, Moulder E, Sharma H.

Bone Joint J. 2021 Feb;103-B(2):279-285. doi: 10.1302/0301-620X.103B2.BJJ-2020-0680.R1.

PMID: 33517738 Clinical Trial.

[Can the Femoro-Epiphyseal Acetabular Roof \(FEAR\) Index Be Used to Distinguish Dysplasia from Impingement?](#)

Smith JT, Jee Y, Daley E, Koueiter DM, Beck M, Zaltz I.

Clin Orthop Relat Res. 2021 May 1;479(5):962-971. doi: 10.1097/CORR.0000000000001610.

PMID: 33394581 Free PMC article.

[How Common Is Femoral Retroversion and How Is it Affected by Different Measurement Methods in Unilateral Slipped Capital Femoral Epiphysis?](#)

Schmaranzer F, Kallini JR, Ferrer MG, Miller PE, Wylie JD, Kim YJ, Novais EN.

Clin Orthop Relat Res. 2021 May 1;479(5):947-959. doi: 10.1097/CORR.0000000000001611.

PMID: 33377759 Free PMC article.

[Surgical Treatment of Distal Radial Fractures with External Fixation Versus Volar Locking Plate: A Multicenter Randomized Controlled Trial.](#)

Ludvigsen T, Matre K, Gudmundsdottir RS, Krukhaug Y, Dybvik EH, Fevang JM.

J Bone Joint Surg Am. 2021 Mar 3;103(5):405-414. doi: 10.2106/JBJS.20.00275.

PMID: 33369985 Clinical Trial.

[What Is the Association Among Epiphyseal Rotation, Translation, and the Morphology of the Epiphysis and Metaphysis in Slipped Capital Femoral Epiphysis?](#)

## Additional File 1

Novais EN, Hosseinzadeh S, Emami SA, Maranhão DA, Kim YJ, Kiapour AM.

Clin Orthop Relat Res. 2021 May 1;479(5):935-944. doi: 10.1097/CORR.0000000000001590.

PMID: 33283994 Free PMC article.

[Differences in Rupture Patterns and Associated Lesions Related to Traumatic Distal Triceps Tendon Rupture Between Outstretched Hand and Direct Injuries.](#)

Lee JH, Ahn KB, Kwon KR, Kim KC, Rhyou IH.

Clin Orthop Relat Res. 2021 Apr 1;479(4):781-789. doi: 10.1097/CORR.0000000000001550.

PMID: 33181575 Free PMC article.

[Hand Bone Age Radiography: Comparison Between Slot-scanning and Conventional Techniques.](#)

Nguyen JC, Guariento A, Nicholson A, Nguyen MK, Gendler L, Ho-Fung V, Zhu X, Talwar D, Darge K, Flynn JM, Cahill PJ.

J Pediatr Orthop. 2021 Feb 1;41(2):e167-e173. doi: 10.1097/BPO.0000000000001710.

PMID: 33165269

[The Incidence of Posterior and Combined AP Shoulder Instability Treatment with Surgical Stabilization Is Higher in an Active Military Population than in the General Population: Findings from the US Naval Academy.](#)

Yow BG, Wade SM, Bedrin MD, Rue JH, LeClere LE.

Clin Orthop Relat Res. 2021 Apr 1;479(4):704-708. doi: 10.1097/CORR.0000000000001530.

PMID: 33094964 Free PMC article.

[Analysis of 280 Magnetically Controlled Growing Rod Lengthenings Comparing External Remote Control Readouts and Radiographic Measurements: Impact of Patient and Deformity Factors.](#)

Arhewoh RE, Mo M, Luhmann SJ.

J Pediatr Orthop. 2021 Feb 1;41(2):e105-e110. doi: 10.1097/BPO.0000000000001678.

PMID: 33074922

[Self-reduction techniques taught via smartphone are effective for anterior shoulder dislocation: prospective randomized study.](#)

Chechik O, Maman E, Kazum E, Grunstein A, Ben-Shabat D, Lin R, Efrima B, Factor S, Rotman D, Krespi R, Dolkart O, Rosenthal R.

Knee Surg Sports Traumatol Arthrosc. 2021 Jul;29(7):2338-2341. doi: 10.1007/s00167-020-06310-z. Epub 2020 Oct 8.

PMID: 33033846 Clinical Trial.

[Intravenous tranexamic acid reduces blood loss and transfusion requirements after periacetabular osteotomy.](#)

Levack AE, McLawhorn AS, Dodwell E, DelPizzo K, Nguyen J, Sink E.

Bone Joint J. 2020 Sep;102-B(9):1151-1157. doi: 10.1302/0301-620X.102B9.BJJ-2019-1777.R1.

PMID: 32862676 Clinical Trial.

[Delays in Obtaining Knee MRI in Pediatric Sports Medicine: Impact of Insurance Type.](#)

Beck JJ, West N, Shaw KG, Jackson N, Bowen RE.

J Pediatr Orthop. 2020 Nov/Dec;40(10):e952-e957. doi: 10.1097/BPO.0000000000001653.

PMID: 32796210 Free PMC article.

[Characteristics and Hospital Costs of Spica Cast Treatment of Non-accidental-related Diaphyseal Femoral Fractures in Children Before Walking Age.](#)

Magee LC, Mahmoud MAH, Baldwin K, Talwar D, Gandhi JS, Arkader A.

J Pediatr Orthop. 2020 Nov/Dec;40(10):e932-e935. doi: 10.1097/BPO.0000000000001577.

PMID: 32740177

[Arthroscopic reduction and internal fixation \(ARIF\) versus open reduction internal fixation \(ORIF\) to elucidate the difference for tibial side PCL avulsion fixation: a randomized controlled trial \(RCT\).](#)

## Additional File 1

Sundararajan SR, Joseph JB, Ramakanth R, Jha AK, Rajasekaran S.  
Knee Surg Sports Traumatol Arthrosc. 2021 Apr;29(4):1251-1257. doi: 10.1007/s00167-020-06144-9.  
Epub 2020 Jul 25.

PMID: 32712683 Clinical Trial.

[Evaluation of containment measures' effect on orthopaedic trauma surgery during the COVID-19 pandemic: a retrospective comparison between 2019 and 2020.](#)

Druel T, Andeol Q, Rongieras F, Bertani A, Bordes M, Alvernhe A.  
Int Orthop. 2020 Nov;44(11):2229-2234. doi: 10.1007/s00264-020-04712-9. Epub 2020 Jul 21.

PMID: 32696333 Free PMC article.

[Is Surgical Resection of the Primary Site Associated with an Improved Overall Survival for Patients with Primary Malignant Bone Tumors Who Have Metastatic Disease at Presentation?](#)

Malik AT, Alexander JH, Mayerson JL, Khan SN, Scharschmidt TJ.  
Clin Orthop Relat Res. 2020 Oct;478(10):2284-2295. doi: 10.1097/CORR.0000000000001361.

PMID: 32667758 Free PMC article.

[Anterolateral ligament reconstruction improves the clinical and functional outcomes of anterior cruciate ligament reconstruction in athletes.](#)

Hamido F, Habiba AA, Marwan Y, Soliman ASI, Elkhadrwe TA, Morsi MG, Shoaeb W, Nagi A.  
Knee Surg Sports Traumatol Arthrosc. 2021 Apr;29(4):1173-1180. doi: 10.1007/s00167-020-06119-w.  
Epub 2020 Jul 2.

PMID: 32617609 Clinical Trial.

[Comparative study of the use of Paediatric Quality Of Life Inventory 4.0 generic core scales in paediatric patients with spine and limb pathologies.](#)

Cheung PWH, Wong CKH, Cheung JPY.  
Bone Joint J. 2020 Jul;102-B(7):890-898. doi: 10.1302/0301-620X.102B7.BJJ-2019-1766.R2.

PMID: 32600144

[Effect of NSAID Use on Bone Healing in Pediatric Fractures: A Preliminary, Prospective, Randomized, Blinded Study.](#)

Nuelle JAV, Coe KM, Oliver HA, Cook JL, Hoernschemeyer DG, Gupta SK.  
J Pediatr Orthop. 2020 Sep;40(8):e683-e689. doi: 10.1097/BPO.0000000000001603.

PMID: 32555047 Clinical Trial.

[Effect of Intravenous Aminocaproic Acid on Blood Loss and Transfusion Requirements After Bilateral Varus Rotational Osteotomy: A Double-blind, Placebo-controlled Randomized Trial.](#)

Swarup I, Nguyen J, Edmonds C, Dodwell E, Scher D.  
J Pediatr Orthop. 2020 Jul;40(6):e454-e459. doi: 10.1097/BPO.0000000000001480.

PMID: 32501914 Free PMC article. Clinical Trial.

[Romosozumab in Skeletally Mature Adults with a Fresh Unilateral Tibial Diaphyseal Fracture: A Randomized Phase-2 Study.](#)

Bhandari M, Schemitsch EH, Karachalios T, Sancheti P, Poolman RW, Caminis J, Daizadeh N, Dent-Acosta RE, Egbuna O, Chines A, Miclau T.

J Bone Joint Surg Am. 2020 Aug 19;102(16):1416-1426. doi: 10.2106/JBJS.19.01008.

PMID: 32358413 Clinical Trial.

[The management of emergency spinal surgery during the COVID-19 pandemic in Italy.](#)

Giorgi PD, Villa F, Gallazzi E, Debernardi A, Schirò GR, Crisà FM, Talamonti G, D'Aliberti G.  
Bone Joint J. 2020 Jun;102-B(6):671-676. doi: 10.1302/0301-620X.102B6.BJJ-2020-0537. Epub 2020 Apr 23.

PMID: 32323563 Free PMC article. Clinical Trial.

[Comparing iatrogenic radial nerve lesions in humeral shaft fractures treated with helical or straight PHILOS plates: a 10-year retrospective cohort study of 62 cases.](#)

Da Silva T, Rummel F, Knop C, Merkle T.  
Arch Orthop Trauma Surg. 2020 Dec;140(12):1931-1937. doi: 10.1007/s00402-020-03438-y. Epub 2020 Apr 6.

## Additional File 1

PMID: 32253549

[ACL deficiency influences medio-lateral tibial alignment and knee varus-valgus during in vivo activities.](#)

Agostinone P, Di Paolo S, Grassi A, Pinelli E, Bontempi M, Bragonzoni L, Zaffagnini S.  
Knee Surg Sports Traumatol Arthrosc. 2021 Feb;29(2):389-397. doi: 10.1007/s00167-020-05979-6. Epub 2020 Apr 6.

PMID: 32253481 Clinical Trial.

[Anterior knee translation measurements after ACL reconstruction are influenced by the type of laximeter used.](#)

Klasan A, Putnis SE, Kandhari V, Oshima T, Parker DA.  
Knee Surg Sports Traumatol Arthrosc. 2020 Nov;28(11):3639-3646. doi: 10.1007/s00167-020-05950-5. Epub 2020 Apr 2.

PMID: 32240345

[No difference in revision rates between anteromedial portal and transtibial drilling of the femoral graft tunnel in primary anterior cruciate ligament reconstruction: early results from the New Zealand ACL Registry.](#)

Rahardja R, Zhu M, Love H, Clatworthy MG, Monk AP, Young SW.  
Knee Surg Sports Traumatol Arthrosc. 2020 Nov;28(11):3631-3638. doi: 10.1007/s00167-020-05959-w. Epub 2020 Apr 1.

PMID: 32239269

[Bipolar hemiarthroplasty versus total hip arthroplasty in allograft-prosthesis composite reconstruction of the proximal femur following primary bone tumour resection.](#)

Jamshidi K, Mirkazemi M, Gharedaghi M, Izanloo A, Mohammadpour M, Pisoudeh K, Bagherifard A, Mirzaei A.  
Bone Joint J. 2020 Apr;102-B(4):524-529. doi: 10.1302/0301-620X.102B4.BJJ-2019-0925.R2.

PMID: 32228068

[Medial patellofemoral ligament reconstruction with allograft versus autograft tissue results in similar recurrent dislocation risk and patient-reported outcomes.](#)

Flanigan DC, Shemory S, Lundy N, Stitgen M, Long JM, Magnussen RA.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2099-2104. doi: 10.1007/s00167-020-05920-x. Epub 2020 Mar 17.

PMID: 32185451

[The space available for the anterior cruciate ligament in the intercondylar notch is less in patients with ACL injury.](#)

Oshima T, Putnis S, Grasso S, Parker DA.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2105-2115. doi: 10.1007/s00167-020-05921-w. Epub 2020 Mar 10.

PMID: 32157364

[Hip displacement and dislocation in a total population of children with cerebral palsy in Scotland.](#)

Wordie SJ, Robb JE, Häggglund G, Bugler KE, Gaston MS.  
Bone Joint J. 2020 Mar;102-B(3):383-387. doi: 10.1302/0301-620X.102B3.BJJ-2019-1203.R1.

PMID: 32114804

[Pediatric Medial Epicondyle Fracture Management: A Systematic Review.](#)

Pezzutti D, Lin JS, Singh S, Rowan M, Balch Samora J.  
J Pediatr Orthop. 2020 Sep;40(8):e697-e702. doi: 10.1097/BPO.0000000000001532.

PMID: 32080057

[Time interval affects physical activity scores: a comparison of the Marx Activity Rating Scale and the Hospital for Special Surgery Pediatric Functional Activity Brief Scale.](#)

Marom N, Xiang W, Heath M, Boyle C, Fabricant PD, Marx RG.  
Knee Surg Sports Traumatol Arthrosc. 2020 Aug;28(8):2619-2625. doi: 10.1007/s00167-020-05895-9. Epub 2020 Feb 19.

PMID: 32076731

## Additional File 1

[Can an Integrative Care Approach Improve Physical Function Trajectories after Orthopaedic Trauma? A Randomized Controlled Trial.](#)

Zdziarski-Horodyski L, Vasilopoulos T, Horodyski M, Hagen JE, Sadasivan KS, Sharififar S, Patrick M, Guenther R, Vincent HK.

Clin Orthop Relat Res. 2020 Apr;478(4):792-804. doi: 10.1097/CORR.0000000000001140.

PMID: 32032087 Free PMC article. Clinical Trial.

[Lower incidence of post-operative septic arthritis following revision anterior cruciate ligament reconstruction with quadriceps tendon compared to hamstring tendons.](#)

Schuster P, Schlumberger M, Mayer P, Raoulis VA, Oremek D, Eichinger M, Richter J.

Knee Surg Sports Traumatol Arthrosc. 2020 Aug;28(8):2572-2577. doi: 10.1007/s00167-020-05878-w. Epub 2020 Feb 4.

PMID: 32020252

[Bone health in adolescents with idiopathic scoliosis.](#)

Diarbakerli E, Savvides P, Wihlborg A, Abbott A, Bergström I, Gerdhem P.

Bone Joint J. 2020 Feb;102-B(2):268-272. doi: 10.1302/0301-620X.102B2.BJJ-2019-1016.R1.

PMID: 32009439

[What Is the Accuracy and Reliability of the Peritubercle Lucency Sign on Radiographs for Early Diagnosis of Slipped Capital Femoral Epiphysis Compared With MRI as the Gold Standard?](#)

Maranho DA, Bixby SD, Miller PE, Hosseinzadeh S, George M, Kim YJ, Novais EN.

Clin Orthop Relat Res. 2020 May;478(5):1049-1059. doi: 10.1097/CORR.0000000000001136.

PMID: 31977443 Free PMC article.

[Are Patient and Surgeon Expectations after ACL Reconstruction Realistic?](#)

Weekes D, Campbell RE, Shi WJ, Ciccotti M, Salvo J, Cohen S, Tucker B, Pepe M, Freedman K, Tjoumakaris F.

Clin Orthop Relat Res. 2020 Mar;478(3):619-628. doi: 10.1097/CORR.0000000000001082.

PMID: 31977430 Free PMC article.

[MRI Is Better Than CT Scan for Detection of Structural Pathologies After Traumatic Posterior Hip Dislocations in Children and Adolescents.](#)

Thanacharoenpanich S, Bixby S, Breen MA, Kim YJ.

J Pediatr Orthop. 2020 Feb;40(2):86-92. doi: 10.1097/BPO.0000000000001127.

PMID: 31923168

[No difference between single and staged posterolateral corner surgical procedures in the multiligament injured/dislocated knee.](#)

Freychet B, Kennedy NI, Sanders TL, Levy NM, Leland DP, Krych AJ, Stuart MJ, Levy BA.

Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2170-2176. doi: 10.1007/s00167-019-05759-x. Epub 2020 Jan 7.

PMID: 31912165

[Safety and efficacy of matrix-associated autologous chondrocyte implantation with spheroid technology is independent of spheroid dose after 4 years.](#)

Niemeyer P, Laute V, Zinser W, John T, Becher C, Diehl P, Kolombe T, Fay J, Siebold R, Fickert S.

Knee Surg Sports Traumatol Arthrosc. 2020 Apr;28(4):1130-1143. doi: 10.1007/s00167-019-05786-8. Epub 2020 Jan 2.

PMID: 31897548 Clinical Trial.

[Primary Arthroscopic Stabilization for a First-Time Anterior Dislocation of the Shoulder: Long-Term Follow-up of a Randomized, Double-Blinded Trial.](#)

Yapp LZ, Nicholson JA, Robinson CM.

J Bone Joint Surg Am. 2020 Mar 18;102(6):460-467. doi: 10.2106/JBJS.19.00858.

PMID: 31895236 Clinical Trial.

[The Oswestry-Bristol Classification.](#)

Sharma N, Brown A, Bouras T, Kuiper JH, Eldridge J, Barnett A.

Bone Joint J. 2020 Jan;102-B(1):102-107. doi: 10.1302/0301-620X.102B1.BJJ-2019-0366.R3.

## Additional File 1

PMID: 31888364

[Mobile Phone Administration of Hip-Specific Patient-Reported Outcome Instruments Correlates Highly With In-office Administration.](#)

Scott EJ, Anthony CA, Rooney P, Lynch TS, Willey MC, Westermann RW.

J Am Acad Orthop Surg. 2020 Jan 1;28(1):e41-e46. doi: 10.5435/JAAOS-D-18-00708.

PMID: 31860543

[Comparative Analysis of Mechanism-Associated 3-Dimensional Tibial Plateau Fracture Patterns.](#)

Xie X, Zhan Y, Wang Y, Lucas JF, Zhang Y, Luo C.

J Bone Joint Surg Am. 2020 Mar 4;102(5):410-418. doi: 10.2106/JBJS.19.00485.

PMID: 31855868

[Latarjet with cortical button fixation is associated with an increase of the risk of recurrent dislocation compared to screw fixation.](#)

Hardy A, Sabatier V, Schoch B, Vigan M, Werthel JD; Study Investigators.

Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2354-2360. doi: 10.1007/s00167-019-05815-6. Epub 2019 Dec 17.

PMID: 31848650 Free PMC article.

[Better functional outcomes for ORIF in tibial eminence fracture treatment: a national comparative multicentric study of ORIF vs ARIF.](#)

Pailhé R, Bauer T, Flecher X, Bonnevalle N, Roussignol X, Saragaglia D, Ehlinger M; SOFCOT.

Knee Surg Sports Traumatol Arthrosc. 2020 Feb;28(2):653-657. doi: 10.1007/s00167-019-05785-9. Epub 2019 Dec 3.

PMID: 31797020

[Quadriceps tendon autograft ACL reconstructed subjects overshoot target knee extension angle during active proprioception testing.](#)

Guney-Deniz H, Harput G, Kaya D, Nyland J, Doral MN.

Knee Surg Sports Traumatol Arthrosc. 2020 Feb;28(2):645-652. doi: 10.1007/s00167-019-05795-7. Epub 2019 Nov 27.

PMID: 31776624

[Preemptive Pregabalin in Children and Adolescents Undergoing Posterior Instrumented Spinal Fusion: A Double-Blinded, Placebo-Controlled, Randomized Clinical Trial.](#)

Helenius LL, Oksanen H, Lastikka M, Pajulo O, Löyttyniemi E, Manner T, Helenius IJ.

J Bone Joint Surg Am. 2020 Feb 5;102(3):205-212. doi: 10.2106/JBJS.19.00650.

PMID: 31770296 Clinical Trial.

[Improving the Diagnosis of Ipsilateral Femoral Neck and Shaft Fractures: A New Imaging Protocol.](#)

Rogers NB, Hartline BE, Achor TS, Kumaravel M, Gary JL, Choo AM, Routt ML Jr, Munz JW, Warner SJ.

J Bone Joint Surg Am. 2020 Feb 19;102(4):309-314. doi: 10.2106/JBJS.19.00568.

PMID: 31725122

[No superiority of dextrose injections over placebo injections for Osgood-Schlatter disease: a prospective randomized double-blind study.](#)

Nakase J, Oshima T, Takata Y, Shimozaki K, Asai K, Tsuchiya H.

Arch Orthop Trauma Surg. 2020 Feb;140(2):197-202. doi: 10.1007/s00402-019-03297-2. Epub 2019 Nov 11.

PMID: 31713082 Clinical Trial.

[Effect of seasonal variation on the peak presentation of slipped capital femoral epiphysis. A comparison of children in Johannesburg, South Africa and London, UK.](#)

Firth GB, Foster M, Pieterse C, Ramguthy Y, Izu A, Bacarese-Hamilton J, Ramachandran M.

J Pediatr Orthop B. 2020 May;29(3):268-274. doi: 10.1097/BPB.0000000000000689.

PMID: 31688335

[Posterior cruciate ligament reconstruction for chronic lesions: clinical experience with hamstring versus ligament advanced reinforcement system as graft.](#)

## Additional File 1

Saragaglia D, Francony F, Gaillot J, Pailhé R, Rubens-Duval B, Lateur G.  
Int Orthop. 2020 Jan;44(1):179-185. doi: 10.1007/s00264-019-04434-7. Epub 2019 Oct 31.  
PMID: 31673741

[Quadriceps tendon autograft for anterior cruciate ligament reconstruction is associated with high revision rates: results from the Danish Knee Ligament Registry.](#)

Lind M, Strauss MJ, Nielsen T, Engebretsen L.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2163-2169. doi: 10.1007/s00167-019-05751-5.  
Epub 2019 Oct 22.  
PMID: 31641810

[Anatomic femoral tunnel placement is difficult by the transtibial technique: comparison of three different femoral tunnel drilling techniques in double-bundle anterior cruciate ligament reconstructions.](#)

Nakamura K, Nakamura T, Horie M, Katagiri H, Otabe K, Nakagawa Y, Amemiya M, Sekiya I, Muneta T, Koga H.  
Knee Surg Sports Traumatol Arthrosc. 2020 Feb;28(2):584-593. doi: 10.1007/s00167-019-05740-8. Epub 2019 Oct 14.  
PMID: 31612263

[Prevention of severe knee injuries in men's elite football by implementing specific training modules.](#)

Krutsch W, Lehmann J, Jansen P, Angele P, Fellner B, Achenbach L, Krutsch V, Nerlich M, Alt V, Loose O.  
Knee Surg Sports Traumatol Arthrosc. 2020 Feb;28(2):519-527. doi: 10.1007/s00167-019-05706-w. Epub 2019 Sep 20.  
PMID: 31541292 Clinical Trial.

[Neither lateral patellar facet nor patellar size are altered in patellofemoral unstable patients: a comparative magnetic resonance imaging analysis.](#)

Otto A, Tscholl PM, Pääsuke R, Herbst E, Willinger L, Imhoff AB, Brucker PU.  
Knee Surg Sports Traumatol Arthrosc. 2020 Apr;28(4):1064-1071. doi: 10.1007/s00167-019-05660-7.  
Epub 2019 Aug 27.  
PMID: 31456062

[Re-revision anterior cruciate ligament reconstruction showed more laxity than revision anterior cruciate ligament reconstruction at a minimum 2-year follow-up.](#)

Yoon KH, Kim JH, Kwon YB, Kim EJ, Kim SG.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jun;28(6):1909-1918. doi: 10.1007/s00167-019-05653-6.  
Epub 2019 Aug 5.  
PMID: 31384982

[ACL reconstruction with adjustable-length loop cortical button fixation results in less tibial tunnel widening compared with interference screw fixation.](#)

Mayr R, Smekal V, Koidl C, Coppola C, Eichinger M, Rudisch A, Kranewitter C, Attal R.  
Knee Surg Sports Traumatol Arthrosc. 2020 Apr;28(4):1036-1044. doi: 10.1007/s00167-019-05642-9.  
Epub 2019 Aug 1.  
PMID: 31372680 Clinical Trial.

[Dorsiflexion is more feasible than plantar flexion in ultrasound evaluation of the calcaneofibular ligament: a combination study of ultrasound and cadaver.](#)

Hattori S, Nimura A, Koyama M, Tsutsumi M, Amaha K, Ohuchi H, Akita K.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jan;28(1):262-269. doi: 10.1007/s00167-019-05630-z. Epub 2019 Jul 20.  
PMID: 31327035 Clinical Trial.

[Cost Analysis of Treating Pediatric Supracondylar Humerus Fractures in Community Hospitals Compared With a Tertiary Care Hospital.](#)

Shasti M, Li TP, Case AL, Hariharan AR, Jauregui JJ, Abzug JM.  
J Am Acad Orthop Surg. 2020 May 1;28(9):377-382. doi: 10.5435/JAAOS-D-18-00585.  
PMID: 31305356

## Additional File 1

[Short stems reproduce femoral offset better than standard stems in total hip arthroplasty: a case-control study.](#)

Erivan R, Muller AS, Villatte G, Millerioux S, Mulliez A, Boisgard S, Descamps S.  
Int Orthop. 2020 Jan;44(1):45-51. doi: 10.1007/s00264-019-04355-5. Epub 2019 Jun 28.  
PMID: 31254017

[Patellar height measurements: Insall-Salvati ratio is most reliable method.](#)

Verhulst FV, van Sambeek JDP, Olthuis GS, van der Ree J, Koëter S.  
Knee Surg Sports Traumatol Arthrosc. 2020 Mar;28(3):869-875. doi: 10.1007/s00167-019-05531-1. Epub 2019 May 14.  
PMID: 31089790

[Hop tests can result in higher limb symmetry index values than isokinetic strength and leg press tests in patients following ACL reconstruction.](#)

Nagai T, Schilaty ND, Laskowski ER, Hewett TE.  
Knee Surg Sports Traumatol Arthrosc. 2020 Mar;28(3):816-822. doi: 10.1007/s00167-019-05513-3. Epub 2019 Apr 25.  
PMID: 31025059 Free PMC article. Clinical Trial.

[Lateral ligament reconstruction and augmented direct anatomical repair restore ligament laxity in patients suffering from chronic ankle instability up to 15 years from surgery.](#)

Ventura A, Legnani C, Corradini C, Borgo E.  
Knee Surg Sports Traumatol Arthrosc. 2020 Jan;28(1):202-207. doi: 10.1007/s00167-018-5244-4. Epub 2018 Oct 30.  
PMID: 30377717

[Platelet-rich plasma injection for acute Achilles tendon rupture : two-year follow-up of the PATH-2 randomized, placebo-controlled, superiority trial.](#)

Keene DJ, Alsousou J, Harrison P, O'Connor HM, Wagland S, Dutton SJ, Hulley P, Lamb SE, Willett K; PATH-2 Trial group.  
Bone Joint J. 2022 Nov;104-B(11):1256-1265. doi: 10.1302/0301-620X.104B11.BJJ-2022-0653.R1.  
PMID: 36317349 Free PMC article. Clinical Trial.

[Postoperative immobilization using a short-arm cast in the semisupination position is appropriate after arthroscopic triangular fibrocartilage complex foveal repair.](#)

Jung HS, Park JG, Park HJ, Lee JS.  
Bone Joint J. 2022 Feb;104-B(2):249-256. doi: 10.1302/0301-620X.104B2.BJJ-2021-0592.R2.  
PMID: 35094578

[Ankle osteonecrosis in fifty-one children and adolescent's leukemia survivors: a prospective randomized study on percutaneous mesenchymal stem cells treatment.](#)

Hernigou P, Auregan JC, Dubory A, Flouzat Lachaniette CH, Rouard H.  
Int Orthop. 2021 Sep;45(9):2383-2393. doi: 10.1007/s00264-021-05051-z. Epub 2021 Apr 23.  
PMID: 33893522 Clinical Trial.

[Comparison of EOSQ-24 and SRS-22 Scores in Congenital Scoliosis: A Preliminary Study.](#)

Li Y, Burke MC, Gagnier J, Caird MS, Farley FA.  
J Pediatr Orthop. 2020 Mar;40(3):e182-e185. doi: 10.1097/BPO.0000000000001412.  
PMID: 31157754

[Effect of Side Struts on the Strength of Long Arm Plaster Splints: A Biomechanical Study.](#)

Thompson SF, McBride C, Conant SH, Moore MC, Lewis TR.  
J Pediatr Orthop. 2020 Feb;40(2):e122-e126. doi: 10.1097/BPO.0000000000001397.  
PMID: 31045629

[Use of Bedside Entertainment and Relaxation Theater \(BERT\) to Reduce Fear and Anxiety Associated With Outpatient Procedures in Pediatric Orthopaedics.](#)

Richey AE, Khoury M, Segovia NA, Hastings KG, Caruso TJ, Frick S, Rodriguez S.  
J Pediatr Orthop. 2022 Jan 1;42(1):30-34. doi: 10.1097/BPO.0000000000002005.  
PMID: 34739431 Clinical Trial.



## Additional File 1

[The femoral deformity in Blount's disease: a comparative study of infantile, juvenile and adolescent Blount's disease.](#)

Firth GB, Ngcakani A, Ramguthy Y, Izu A, Robertson A.

J Pediatr Orthop B. 2020 Jul;29(4):317-322. doi: 10.1097/BPB.0000000000000722.

PMID: 32479715

[Recurrent patellar dislocations in adolescents result in decreased knee flexion during the entire gait cycle.](#)

Camathias C, Ammann E, Meier RL, Rutz E, Vavken P, Studer K.

Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2053-2066. doi: 10.1007/s00167-020-05911-y.

Epub 2020 Mar 4.

PMID: 32130443

[Woodcast versus standard casting material for the immobilization of nonoperatively treated distal radial fractures.](#)

Gwilym S, Sansom L, Rombach I, Dutton SJ, Achten J, Costa ML.

Bone Joint J. 2020 Jan;102-B(1):48-54. doi: 10.1302/0301-620X.102B1.BJJ-2019-0243.R2.

PMID: 31888371 Clinical Trial.

## Final Included Articles/Results

Items 1-93

[Prospective, Randomized Ponseti Treatment for Clubfoot: Orthopaedic Surgeons Versus Physical Therapists.](#)

Chen SN, Ragsdale TD, Rhodes LN, Locke LL, Moisan A, Kelly DM.

J Pediatr Orthop. 2023 Feb 1;43(2):e93-e99. doi: 10.1097/BPO.0000000000002291. Epub 2022 Nov 4.

PMID: 36607913 Clinical Trial.

[Postoperative outcomes of pedicle screw instrumentation for adolescent idiopathic scoliosis with and without a subfascial wound drain: a multicentre randomized controlled trial.](#)

Helenius L, Gerdhem P, Ahonen M, Syvänen J, Jalkanen J, Charalampidis A, Nietosvaara Y, Helenius I.

Bone Joint J. 2022 Sep;104-B(9):1067-1072. doi: 10.1302/0301-620X.104B9.BJJ-2022-0391.R1.

PMID: 36047026 Clinical Trial.

[The British Orthopaedic Surgery Surveillance study: Perthes' disease: the epidemiology and two-year outcomes from a prospective cohort in Great Britain.](#)

Perry DC, Arch B, Appelbe D, Francis P, Craven J, Monsell FP, Williamson P, Knight M; BOSS collaborators.

Bone Joint J. 2022 Apr;104-B(4):510-518. doi: 10.1302/0301-620X.104B4.BJJ-2021-1708.R1.

PMID: 35360941 Free PMC article. Clinical Trial.

[Observation Versus Cast Treatment of Toddler's Fractures.](#)

Fox J, Enriquez B, Bompadre V, Carlin K, Dales M.

J Pediatr Orthop. 2022 May-Jun 01;42(5):e480-e485. doi: 10.1097/BPO.0000000000002086.

PMID: 35180728 Clinical Trial.

[Elastic stable intramedullary nailing versus submuscular plating in pediatric diaphyseal femur fractures: a randomized controlled trial among children in South India.](#)

James D, Martin D, Kumar A, Krishnan S, Gahukamble A, Madhuri V, David T, Palocaren T.

J Pediatr Orthop B. 2022 Mar 1;31(2):e122-e129. doi: 10.1097/BPB.0000000000000933.

PMID: 35102105 Clinical Trial.

[A comparison of the post-fusion outcome of patients with early-onset scoliosis treated with traditional and magnetically controlled growing rods.](#)

Tahir M, Mehta D, Sandhu C, Jones M, Gardner A, Mehta JS.

Bone Joint J. 2022 Feb;104-B(2):257-264. doi: 10.1302/0301-620X.104B2.BJJ-2021-1198.R1.

PMID: 35094579

[How Do We Best Educate Our Patients' Caregivers? Comparing the Efficacy of Print Versus Media-based Education Materials in Peripheral Nerve Catheter and Pain Pump Education.](#)

## Additional File 1

Parikh HB, Gagliardi AG, Carry PM, Albright JC, Mandler TN.

J Pediatr Orthop. 2022 Jan 1;42(1):35-39. doi: 10.1097/BPO.0000000000001997.

PMID: 34723897 Clinical Trial.

[Matched Comparison of Magnetically Controlled Growing Rods with Traditional Growing Rods in Severe Early-Onset Scoliosis of  \$\geq 90^\circ\$ : An Interim Report on Outcomes 2 Years After Treatment.](#)

Saارين AJ, Sponseller PD, Andras LM, Skaggs DL, Emans JB, Thompson GH, Helenius IJ; Pediatric Spine Study Group.

J Bone Joint Surg Am. 2022 Jan 5;104(1):41-48. doi: 10.2106/JBJS.20.02108.

PMID: 34644282

[Cryoablation-aided joint retention surgery for epiphysis involvement in osteosarcoma compared with endoprosthetic replacement.](#)

Li J, Lu Y, Chen G, Li M, Xiao X, Ji C, Wang Z, Guo Z.

Bone Joint J. 2021 Aug;103-B(8):1421-1427. doi: 10.1302/0301-620X.103B8.BJJ-2020-2528.R2.

PMID: 34334045

[Rate of Scoliosis Correction After Anterior Spinal Growth Tethering for Idiopathic Scoliosis.](#)

Takahashi Y, Saito W, Yaszay B, Bartley CE, Bastrom TP, Newton PO.

J Bone Joint Surg Am. 2021 Sep 15;103(18):1718-1723. doi: 10.2106/JBJS.20.02071.

PMID: 34288633

[Measurable Thoracic Motion Remains at 1 Year Following Anterior Vertebral Body Tethering, with Sagittal Motion Greater Than Coronal Motion.](#)

Buyuk AF, Milbrandt TA, Mathew SE, Larson AN.

J Bone Joint Surg Am. 2021 Dec 15;103(24):2299-2305. doi: 10.2106/JBJS.20.01533.

PMID: 34270505 Clinical Trial.

[Comparison of Outcomes by Reconstructive Strategy in Patients with Prostheses for Proximal Femoral Focal Deficiency.](#)

Floccari LV, Jeans KA, Herring JA, Johnston CE, Karol LA.

J Bone Joint Surg Am. 2021 Oct 6;103(19):1817-1825. doi: 10.2106/JBJS.20.02001.

PMID: 34270496

[High compliance with the injury prevention exercise programme Knee Control is associated with a greater injury preventive effect in male, but not in female, youth floorball players.](#)

Åkerlund I, Waldén M, Sonesson S, Lindblom H, Hägglund M.

Knee Surg Sports Traumatol Arthrosc. 2022 Apr;30(4):1480-1490. doi: 10.1007/s00167-021-06644-2.

Epub 2021 Jul 2.

PMID: 34213586 Free PMC article. Clinical Trial.

[Anatomic single vs. double-bundle ACL reconstruction: a randomized clinical trial-Part 1: clinical outcomes.](#)

Irrgang JJ, Tashman S, Patterson CG, Musahl V, West R, Oostdyk A, Galvin B, Poploski K, Fu FH.

Knee Surg Sports Traumatol Arthrosc. 2021 Aug;29(8):2665-2675. doi: 10.1007/s00167-021-06585-w.

Epub 2021 May 10.

PMID: 33970295 Free PMC article. Clinical Trial.

[Spinal Anesthesia is Superior to General Anesthesia for Percutaneous Achilles Tenotomy in Infants.](#)

Acquaviva MA, Caltoun CB, Bielski RJ, Loder RT, Boyer TJ, Cossu AE, Castelluccio PF.

J Pediatr Orthop. 2021 Jul 1;41(6):352-355. doi: 10.1097/BPO.0000000000001826.

PMID: 33843786

[Functional and radiographic comparison of subtalar arthroereisis and lateral calcaneal lengthening in the surgical treatment of flexible flatfoot in children.](#)

Tahririan MA, Ramtin S, Taheri P.

Int Orthop. 2021 Sep;45(9):2291-2298. doi: 10.1007/s00264-020-04899-x. Epub 2021 Apr 1.

PMID: 33796883 Clinical Trial.

## Additional File 1

[Posterior Tibial Slope is Increased in Patients With Tibial Tubercle Fractures and Osgood-Schlatter Disease.](#)

Sheppard ED, Ramamurti P, Stake S, Stadecker M, Rana MS, Oetgen ME, Young ML, Martin BD.  
J Pediatr Orthop. 2021 Jul 1;41(6):e411-e416. doi: 10.1097/BPO.0000000000001818.  
PMID: 33782370

[Patients With Symptomatic Sequelae of Slipped Capital Femoral Epiphysis Have Advanced Cartilage Wear at the Time of Surgical Intervention.](#)

Lieberman EG, Pascual-Garrido C, Abu-Amer W, Nepple JJ, Shoenecker PL, Clohisy JC.  
J Pediatr Orthop. 2021 Jul 1;41(6):e398-e403. doi: 10.1097/BPO.0000000000001797.  
PMID: 33734202

[Open Reduction of Medial Epicondyle Fractures in the Pediatric Population: Supine Versus Prone Position.](#)

Baghdadi S, Weltsch D, Arkader A, Harwood K, Lawrence JTR.  
J Pediatr Orthop. 2021 May-Jun 01;41(5):273-278. doi: 10.1097/BPO.0000000000001794.  
PMID: 33734199

[Synthetic Cast Material Versus Plaster of Paris for the Treatment of Idiopathic Clubfoot by the Ponseti Protocol: A Comparative Analysis of 136 Feet.](#)

Monforte S, Alberghina F, Paonessa M, Canavese F, Andreacchio A.  
J Pediatr Orthop. 2021 May-Jun 01;41(5):296-300. doi: 10.1097/BPO.0000000000001788.  
PMID: 33710129

[The Ponseti Method for the Treatment of Clubfeet Associated With Amniotic Band Syndrome: A Single Institution 20-Year Experience.](#)

Esparza M, Tran E, Richards BS, Jo CH, Shivers C, Karacz C, Polk J, Riccio AI.  
J Pediatr Orthop. 2021 May-Jun 01;41(5):301-305. doi: 10.1097/BPO.0000000000001789.  
PMID: 33710127

[Anatomic single- and double-bundle ACL reconstruction both restore dynamic knee function: a randomized clinical trial-part II: knee kinematics.](#)

Tashman S, Zandiyeh P, Irrgang JJ, Musahl V, West RV, Shah N, Fu FH.  
Knee Surg Sports Traumatol Arthrosc. 2021 Aug;29(8):2676-2683. doi: 10.1007/s00167-021-06479-x.  
Epub 2021 Feb 22.  
PMID: 33615404 Free PMC article. Clinical Trial.

[Long-term Functional Outcomes and Complications in Operative Versus Nonoperative Treatment for Displaced Midshaft Clavicle Fractures in Adolescents: A Retrospective Comparative Study.](#)

Riiser MO, Molund M.  
J Pediatr Orthop. 2021 May-Jun 01;41(5):279-283. doi: 10.1097/BPO.0000000000001768.  
PMID: 33606445

[Outcomes of a Minimally Invasive Approach for Congenital Vertical Talus With a Comparison Between the Idiopathic and Syndromic Feet.](#)

Hafez M, Davis N.  
J Pediatr Orthop. 2021 Apr 1;41(4):249-254. doi: 10.1097/BPO.0000000000001769.  
PMID: 33560706

[Does the Addition of a Vascularized Fibula Improve the Results of a Massive Bone Allograft Alone for Intercalary Femur Reconstruction of Malignant Bone Tumors in Children?](#)

Errani C, Alfaro PA, Ponz V, Colangeli M, Donati DM, Manfrini M.  
Clin Orthop Relat Res. 2021 Jun 1;479(6):1296-1308. doi: 10.1097/CORR.0000000000001639.  
PMID: 33497066 Free PMC article.

[Is There a Benefit to Weaning Pavlik Harness Treatment in Infantile DDH?](#)

Bram JT, Gohel S, Castañeda PG, Sankar WN.  
J Pediatr Orthop. 2021 Mar 1;41(3):143-148. doi: 10.1097/BPO.0000000000001753.  
PMID: 33448722

## Additional File 1

[Comparison of Short-leg and Long-leg Casts for the Treatment of Distal Third Tibial Shaft Fractures in Children.](#)

Barnett SA, Fontenot B, Leonardi C, Gonzales JA, Gargiulo D, Heffernan MJ.  
J Pediatr Orthop. 2021 Mar 1;41(3):e259-e265. doi: 10.1097/BPO.0000000000001741.  
PMID: 33417388

[Lower body mass index and age are predictive of improved pain and health utility scores following arthroscopic management of femoroacetabular impingement.](#)

Kay J, Simunovic N, Heels-Ansdell D, Bhandari M, Ayeni OR; FIRST Investigators.  
Knee Surg Sports Traumatol Arthrosc. 2021 May;29(5):1461-1473. doi: 10.1007/s00167-020-06395-6.  
Epub 2021 Jan 5.  
PMID: 33398481 Clinical Trial.

[A comparison of conventional and minimally invasive multilevel surgery for children with diplegic cerebral palsy.](#)

Edwards TA, Thompson N, Prescott RJ, Stebbins J, Wright JG, Theologis T.  
Bone Joint J. 2021 Jan;103-B(1):192-197. doi: 10.1302/0301-620X.103B1.BJJ-2020-0714.R1.  
PMID: 33380192

[Does a History of Slipped Capital Femoral Epiphysis in Patients Undergoing Femoroacetabular Osteoplasty for Femoroacetabular Impingement Affect Outcomes Scores or Risk of Reoperation?](#)

Sutton R, Yacovelli S, Vahedi H, Parvizi J.  
Clin Orthop Relat Res. 2021 May 1;479(5):1028-1036. doi: 10.1097/CORR.0000000000001576.  
PMID: 33231940 Free PMC article.

[Is Social Deprivation Associated with PROMIS Outcomes After Upper Extremity Fractures in Children?](#)

Evans S, Okoroafor UC, Calfee RP.  
Clin Orthop Relat Res. 2021 Apr 1;479(4):826-834. doi: 10.1097/CORR.0000000000001571.  
PMID: 33196588 Free PMC article.

[Part-time Abduction Bracing in Infants With Residual Acetabular Dysplasia: Does Compliance Monitoring Support a Dose-dependent Relationship?](#)

Swarup I, Talwar D, Sankar WN.  
J Pediatr Orthop. 2021 Feb 1;41(2):e125-e129. doi: 10.1097/BPO.0000000000001704.  
PMID: 33165268 Clinical Trial.

[Quadriceps Strength Is Influenced by Skeletal Maturity in Adolescents Recovering From Anterior Cruciate Ligament Reconstruction.](#)

Casp AJ, Bodkin SG, Kew ME, Noona SW, Lesevic M, Hart JM, Diduch D.  
J Pediatr Orthop. 2021 Feb 1;41(2):e141-e146. doi: 10.1097/BPO.0000000000001706.  
PMID: 33165267

[What is the Optimal Surgical Method for Achieving Correction and Avoiding Neurological Complications in Pediatric High-grade Spondylolisthesis?](#)

Rocos B, Strantzas S, Zeller R, Lewis S, Tan T, Lebel D.  
J Pediatr Orthop. 2021 Mar 1;41(3):e217-e225. doi: 10.1097/BPO.0000000000001707.  
PMID: 33165266

[Why Irrigate for the Same Contamination Rate: Wound Contamination in Pediatric Spinal Surgery Using Betadine Versus Saline.](#)

Cohen LL, Schwend RM, Flynn JM, Hedequist DJ, Karlin LI, Emans JB, Snyder BD, Hresko MT, Anderson JT, Leamon J, Talwar D, Glotzbecker MP.  
J Pediatr Orthop. 2020 Nov/Dec;40(10):e994-e998. doi: 10.1097/BPO.0000000000001620.  
PMID: 33044376 Clinical Trial.

[Comparison of plaster-of-Paris casts and Woodcast splints for immobilization of the limb during serial manipulation and casting for idiopathic clubfoot in infants.](#)

Singh KA, Shah H, Joseph B.  
Bone Joint J. 2020 Oct;102-B(10):1399-1404. doi: 10.1302/0301-620X.102B10.BJJ-2020-0181.R4.  
PMID: 32993325 Clinical Trial.

## Additional File 1

[A Comparison of Casting Versus Splinting for Nonoperative Treatment of Pediatric Phalangeal Neck Fractures.](#)

Liao JCY, Huan SKW, Tan RES, Lim JX, Chong AKS, Das De S.  
J Pediatr Orthop. 2021 Jan;41(1):e30-e35. doi: 10.1097/BPO.0000000000001687.  
PMID: 32991491

[Randomized Trial Comparing Preliminary Results of Radialization and Centralization Procedures in Bayne Types 3 and 4 Radial Longitudinal Deficiency.](#)

Mittal S, Garg B, Mehta N, Kumar V, Kotwal P.  
J Pediatr Orthop. 2020 Oct;40(9):509-514. doi: 10.1097/BPO.0000000000001606.  
PMID: 32931691 Clinical Trial.

[Quadruple Versus Double Flexible Intramedullary Nails to Treat Pediatric Distal-third Tibial Shaft Fractures: A Biomechanical Comparison.](#)

Zubair A, Samuelson EM, Morris RP, Foreman M, Gagnon-Bartsch JA, Rosenfeld SB.  
J Pediatr Orthop. 2020 Oct;40(9):487-491. doi: 10.1097/BPO.0000000000001604.  
PMID: 32931690

[Surgical Treatment of Femoroacetabular Impingement: Hip Arthroscopy Versus Surgical Hip Dislocation: A Propensity-Matched Analysis.](#)

Nepple JJ, Zaltz I, Larson CM, Beaulé PE, Kim YJ, Millis MB, Sierra RJ, Clohisy JC; ANCHOR Group.  
J Bone Joint Surg Am. 2020 Nov 4;102(Suppl 2):51-58. doi: 10.2106/JBJS.20.00265.  
PMID: 32925230

[Safely Reducing the Incidence of Contralateral Slipped Capital Femoral Epiphysis: Results of a Prospectively Implemented Prophylactic Fixation Protocol Using the Posterior Sloping Angle.](#)

St George J, Genon M, Little DG.  
J Pediatr Orthop. 2021 Jan;41(1):e50-e54. doi: 10.1097/BPO.0000000000001669.  
PMID: 32868515 Clinical Trial.

[Comparison of Iliac and Femoral Autograft Practices in Pemberton Pelvic Osteotomy.](#)

Bulut M, Azboy I, Ozkul E, Karakurt L.  
J Pediatr Orthop. 2021 Jan;41(1):46-50. doi: 10.1097/BPO.0000000000001665.  
PMID: 32804869 Clinical Trial.

[Improving Safety and Efficacy in the Surgical Management of Low-tone Neuromuscular Scoliosis: Integrated Approach With a 2-attending Surgeon Operative Team and Modified Anesthesia Protocol.](#)

Ozhan MO, Bakircioglu S, Bekmez S, Olgun ZD, Süzer A, Demirkiran HG, Yazici M.  
J Pediatr Orthop. 2021 Jan;41(1):e1-e6. doi: 10.1097/BPO.0000000000001658.  
PMID: 32804863

[Closed Vs. Open Reduction/Salter Innominate Osteotomy for Developmental Hip Dislocation After Age 18 Months: Comparative Survival at 45-Year Follow-up.](#)

Scott EJ, Dolan LA, Weinstein SL.  
J Bone Joint Surg Am. 2020 Aug 5;102(15):1351-1357. doi: 10.2106/JBJS.19.01278.  
PMID: 32769602

[Treatment of femoral fractures in children aged two to six.](#)

Gordon JE, Anderson JT, Schoenecker PL, Dobbs MB, Luhmann SJ, Hoernschemeyer DG.  
Bone Joint J. 2020 Aug;102-B(8):1056-1061. doi: 10.1302/0301-620X.102B8.BJJ-2019-1060.R3.  
PMID: 32731819

[Treatment for Clubfoot: Stockinette Versus Webril Cast Padding in the Ponseti Method.](#)

Marien M, Abouassaly M, Jarvis J, Smit K, Kontio K.  
J Pediatr Orthop. 2020 Nov/Dec;40(10):e947-e951. doi: 10.1097/BPO.0000000000001617.  
PMID: 32569033 Clinical Trial.

[Is Growth-friendly Surgical Treatment Superior to One-stage Posterior Spinal Fusion in 9- to 11-year-old Children with Congenital Scoliosis?](#)

Xu L, Sun X, Du C, Zhou Q, Shi B, Zhu Z, Qiu Y.

## Additional File 1

Clin Orthop Relat Res. 2020 Oct;478(10):2375-2386. doi: 10.1097/CORR.0000000000001377.  
PMID: 32568886 Free PMC article.

[Lengthening of the Humerus Using a Motorized Lengthening Nail: A Retrospective Comparative Series.](#)

Morrison SG, Georgiadis AG, Dahl MT.

J Pediatr Orthop. 2020 Jul;40(6):e479-e486. doi: 10.1097/BPO.0000000000001453.

PMID: 32501920

[Does Shorter Time to Treatment of Pediatric Femur Shaft Fractures Impact Clinical Outcomes?](#)

Grauberger J, O'Byrne M, Stans AA, Shaughnessy WJ, Larson AN, Milbrandt TA.

J Pediatr Orthop. 2020 Jul;40(6):e435-e439. doi: 10.1097/BPO.0000000000001544.

PMID: 32501907 Free PMC article.

[Comparison of Staged Versus Same-day Bilateral Hip Surgery in Nonambulatory Children With Cerebral Palsy.](#)

Louer CR, Nunez J, Bomar JD, Fischer-Colbrie ME, Chambers HG, Upasani VV.

J Pediatr Orthop. 2020 Nov/Dec;40(10):608-614. doi: 10.1097/BPO.0000000000001595.

PMID: 32453016

[What Proportion of Patients Undergoing Bernese Periacetabular Osteotomy Experience Nonunion, and What Factors are Associated with Nonunion?](#)

Selberg CM, Davila-Parrilla AD, Williams KA, Kim YJ, Millis MB, Novais EN.

Clin Orthop Relat Res. 2020 Jul;478(7):1648-1656. doi: 10.1097/CORR.0000000000001296.

PMID: 32452931 Free PMC article.

[Anterior cruciate ligament reconstruction with bone-patellar tendon-bone graft is associated with higher and earlier return to sports as compared to hamstring tendon graft.](#)

Gupta R, Kapoor A, Soni A, Khatri S, Masih GD.

Knee Surg Sports Traumatol Arthrosc. 2020 Nov;28(11):3659-3665. doi: 10.1007/s00167-020-06074-6.

Epub 2020 May 24.

PMID: 32448944

[Distraction-to-stall Versus Targeted Distraction in Magnetically Controlled Growing Rods.](#)

Dragsted C, Fruergaard S, Jain MJ, Deveza L, Heydemann J, Ohrt-Nissen S, Andersen T, Gehrchen M, Dahl B; Texas Children's Hospital Spine Study Group.

J Pediatr Orthop. 2020 Oct;40(9):e811-e817. doi: 10.1097/BPO.0000000000001585.

PMID: 32398627

[Intraoperative Prone Radiographs During Scheuermann Kyphosis Correction Closely Estimate Standing Thoracic and Lumbar Parameters at 2 Years.](#)

Greenhill DA, Poppino KF, Jo CH, Sucato DJ.

J Pediatr Orthop. 2020 Nov/Dec;40(10):581-586. doi: 10.1097/BPO.0000000000001581.

PMID: 32379246

[Which Acetabular Landmarks are the Most Useful for Measuring the Acetabular Index and Center-edge Angle in Developmental Dysplasia of the Hip? A Comparison of Two Methods.](#)

Shin CH, Yang E, Lim C, Yoo WJ, Choi IH, Cho TJ.

Clin Orthop Relat Res. 2020 Sep;478(9):2120-2131. doi: 10.1097/CORR.0000000000001289.

PMID: 32379138 Free PMC article.

[Anterior Spinal Growth Modulation in Skeletally Immature Patients with Idiopathic Scoliosis: A Comparison with Posterior Spinal Fusion at 2 to 5 Years Postoperatively.](#)

Newton PO, Bartley CE, Bastrom TP, Kluck DG, Saito W, Yaszay B.

J Bone Joint Surg Am. 2020 May 6;102(9):769-777. doi: 10.2106/JBJS.19.01176.

PMID: 32379117

[Evolution of concentricity after closed reduction in developmental dysplasia of the hip.](#)

Zhou W, Sankar WN, Zhang F, Li L, Zhang L, Zhao Q.

Bone Joint J. 2020 May;102-B(5):618-626. doi: 10.1302/0301-620X.102B5.BJJ-2019-1496.R1.

## Additional File 1

PMID: 32349601 Clinical Trial.

[Comparison of Early Definitive Fusion and Traditional Growing Rods in Early-onset Dystrophic Scoliosis in Neurofibromatosis Type 1: A Preliminary Report.](#)

Tauchi R, Kawakami N, Suzuki T, Uno K, Yamaguchi T, Yanagida H, Yamamoto T, Murakami H, Demura S, Kotani T; NPO Japan Spinal Deformity Institute.

J Pediatr Orthop. 2020 Nov/Dec;40(10):569-574. doi: 10.1097/BPO.0000000000001579.

PMID: 32341243

[Prospective Comparison of Patient-selected Operative Versus Nonoperative Treatment of Scheuermann Kyphosis.](#)

Green C, Brown K, Caine H, Dieckmann RJ, Rathjen KE.

J Pediatr Orthop. 2020 Sep;40(8):e716-e719. doi: 10.1097/BPO.0000000000001576.

PMID: 32341242

[Utilization of Telemedicine Virtual Visits in Pediatric Spinal Deformity Patients: A Comparison of Feasibility and Patient Satisfaction at a Large Academic Center.](#)

Sultan AA, Acuña AJ, Samuel LT, Rabin JM, Grits D, Gurd DP, Kuivila TE, Goodwin RC.

J Pediatr Orthop. 2020 Sep;40(8):e712-e715. doi: 10.1097/BPO.0000000000001553.

PMID: 32235192

[Trochleoplasty improves knee flexion angles and quadriceps function during gait only if performed bilaterally.](#)

Ammann E, Meier RL, Rutz E, Vavken P, Studer K, Camathias C.

Knee Surg Sports Traumatol Arthrosc. 2020 Jul;28(7):2067-2076. doi: 10.1007/s00167-020-05906-9. Epub 2020 Mar 4.

PMID: 32130444

[Intraoperative Issues and Clinical and Radiographic Outcomes of Femur Fractures Treated With Flexible Nails: A Comparison of Cases Utilizing Skeletal Traction and a Traction Table to Cases Using Manual Traction Only.](#)

Canavese F, Alberghina F, Cravino M, Paonessa M, Dimeglio A, Andreacchio A.

J Pediatr Orthop. 2020 Sep;40(8):e676-e682. doi: 10.1097/BPO.0000000000001538.

PMID: 32118797

[Deformity correction in thoracic adolescent idiopathic scoliosis.](#)

Pesenti S, Lafage R, Henry B, Kim HJ, Bolzinger M, Elysée J, Cunningham M, Choufani E, Lafage V, Blanco J, Jouve JL, Widmann R.

Bone Joint J. 2020 Mar;102-B(3):376-382. doi: 10.1302/0301-620X.102B3.BJJ-2019-0993.R1.

PMID: 32114809

[Biomechanical and Clinical Comparative Study of the New Elastic Stable Intramedullary Nailing "MJ-FLEX Orthofix".](#)

Denis D, Maucourt-Boulch D, Suchier Y, Mamadou TB, Metaizeau JD.

J Pediatr Orthop. 2020 Mar;40(3):149-155. doi: 10.1097/BPO.0000000000001206.

PMID: 32028477

[Should instrumented spinal fusion in nonambulatory children with neuromuscular scoliosis be extended to L5 or the pelvis?](#)

Tøndevold N, Lastikka M, Andersen T, Gehrchen M, Helenius I.

Bone Joint J. 2020 Feb;102-B(2):261-267. doi: 10.1302/0301-620X.102B2.BJJ-2019-0772.R2.

PMID: 32009441

[Predictors of Open Reduction in Pediatric Femur Fractures Treated With Flexible Nails.](#)

Heffernan MJ, Shelton W, Song B, Lucak TJ, Leonardi C, Kadhim M.

J Pediatr Orthop. 2020 Aug;40(7):e566-e571. doi: 10.1097/BPO.0000000000001511.

PMID: 31972726

## Additional File 1

[Comparison of total cost and outcomes between single-stage open reduction and Pemberton periacetabular osteotomy operation and two separate consecutive operations in treatment of bilateral developmental hip dysplasia in children at walking age.](#)

Yilar S, Topal M, Zencirli K, Köse M, Ezirmik N.

J Pediatr Orthop B. 2020 May;29(3):256-260. doi: 10.1097/BPB.0000000000000714.

PMID: 31923136

[Comparison of surgical and nonsurgical containment methods for patients with Legg-Calvé-Perthes disease of the onset ages between 6.0 and 8.0 years: Salter osteotomy versus a non-weight-bearing hip flexion-abduction brace.](#)

Kaneko H, Kitoh H, Mishima K, Matsushita M, Hattori T, Noritake K, Ishiguro N, Yoshihashi Y.

J Pediatr Orthop B. 2020 Nov;29(6):542-549. doi: 10.1097/BPB.0000000000000710.

PMID: 31856043

[Comparison of Hip and Knee Arthroplasty Rates of Individuals With and Without Prader-Willi Syndrome.](#)

van Bosse HJP, Gantz MG, Ong KL, Cox JB.

J Pediatr Orthop. 2020 May/Jun;40(5):e362-e366. doi: 10.1097/BPO.0000000000001490.

PMID: 31834241

[Radius and ulna locking intramedullary nails are safe and reliable after adolescent forearm fractures: a case-controlled study in adolescents.](#)

Özcan Ç, Taylan Öz T, Türkmen İ.

J Pediatr Orthop B. 2020 Mar;29(2):164-171. doi: 10.1097/BPB.0000000000000703.

PMID: 31821273

[A comparative study of pedobarography and ankle kinematics between children with idiopathic clubfoot after a soft tissue release procedure and controls.](#)

Limpaphayom N, Tootakong T, Osateerakun P.

Int Orthop. 2020 Feb;44(2):319-327. doi: 10.1007/s00264-019-04447-2. Epub 2019 Dec 3.

PMID: 31796992

[Modified split tendon transfer of posterior tibialis muscle in the treatment of spastic equinovarus foot deformity: long-term results and comparison with the standard procedure.](#)

Aleksić M, Baščarević Z, Stevanović V, Rakočević J, Baljuzović A, Čobeljić G.

Int Orthop. 2020 Jan;44(1):155-160. doi: 10.1007/s00264-019-04443-6. Epub 2019 Nov 19.

PMID: 31740994

[Reconstruction of the Suprascapular Nerve in Brachial Plexus Birth Injury: A Comparison of Nerve Grafting and Nerve Transfers.](#)

Manske MC, Kalish LA, Cornwall R, Peljovich AE, Bauer AS.

J Bone Joint Surg Am. 2020 Feb 19;102(4):298-308. doi: 10.2106/JBJS.19.00627.

PMID: 31725125

[Isolated Trochanteric Descent and Greater Trochanteric Apophyseodesis Are Not Effective in the Treatment of Post-Perthes Deformity.](#)

Haskel JD, Feder OI, Mijares J, Castañeda P.

Clin Orthop Relat Res. 2020 Jan;478(1):169-175. doi: 10.1097/CORR.0000000000000990.

PMID: 31725028 Free PMC article.

[Comparison of the Results of Primary Versus Repeat Hamstring Surgical Lengthening in Cerebral Palsy.](#)

Morais Filho MC, Blumetti FC, Kawamura CM, Fujino MH, Matias MS, Lopes JAF.

J Pediatr Orthop. 2020 May/Jun;40(5):e380-e384. doi: 10.1097/BPO.0000000000001464.

PMID: 31688817

[Which Factors Are Associated with Local Control and Survival of Patients with Localized Pelvic Ewing's Sarcoma? A Retrospective Analysis of Data from the Euro-EWING99 Trial.](#)

Andreou D, Ranft A, Gosheger G, Timmermann B, Ladenstein R, Hartmann W, Bauer S, Baumhoer D, van den Berg H, Dijkstra PDS, Dürr HR, Gelderblom H, Harges J, Hjorth L, Kreyer J, Kruseova J, Leithner A,



## Additional File 1

Scobioala S, Streitbürger A, Tunn PU, Wardelmann E, Windhager R, Jürgens H, Dirksen U; GPOH-Euro-EWING99 consortium.

Clin Orthop Relat Res. 2020 Feb;478(2):290-302. doi: 10.1097/CORR.0000000000000962.

PMID: 31580267 Free PMC article.

[Comparison between the Pavlik harness and the Tübingen hip flexion splint for the early treatment of developmental dysplasia of the hip.](#)

Ran L, Chen H, Pan Y, Lin Q, Canavese F, Chen S.

J Pediatr Orthop B. 2020 Sep;29(5):424-430. doi: 10.1097/BPB.0000000000000667.

PMID: 31503108

[Evolution of Hip Dysplasia in Pediatric Patients With Prader-Willi Syndrome Treated With Growth Hormone Early in Development.](#)

Laumonerie P, Tibbo ME, Ibnoukhatib A, Kerezoudis P, Diene G, Thevenin Lemoine C, Accadbled F, Sales de Gauzy J.

J Pediatr Orthop. 2020 May/Jun;40(5):e357-e361. doi: 10.1097/BPO.0000000000001443.

PMID: 31479030

[Comparison of two different methods in preoperative planning of the amount of lengthening in Z achilloplasty technique.](#)

Ozyalvac ON, Akpınar E.

J Pediatr Orthop B. 2020 Jan;29(1):35-39. doi: 10.1097/BPB.0000000000000666.

PMID: 31425334

[Inpatient Versus Outpatient Treatment of Gartland Type II Supracondylar Humerus Fractures: A Cost and Safety Comparison.](#)

Makarewich CA, Stotts AK, Yoo M, Nelson RE, Rothberg DL.

J Pediatr Orthop. 2020 May/Jun;40(5):211-217. doi: 10.1097/BPO.0000000000001442.

PMID: 31415017 Free PMC article.

[Comparison of plate and screw constructs versus screws only for anterior distal femoral hemiepiphysiodesis in children.](#)

Nazareth A, Gyorfi MJ, Rethlefsen SA, Wiseley B, Noonan K, Kay RM.

J Pediatr Orthop B. 2020 Jan;29(1):53-61. doi: 10.1097/BPB.0000000000000661.

PMID: 31361704

[Functional and radiological outcome in patients with acute Monteggia fracture treated surgically: a comparison between closed reduction and external fixation versus closed reduction and elastic stable intramedullary nailing.](#)

Yuan Z, Xu H, Li Y, Li J, Liu Y, Canavese F.

J Pediatr Orthop B. 2020 Sep;29(5):438-444. doi: 10.1097/BPB.0000000000000645.

PMID: 31305359

[Utility of Follow-up Radiographs After Pin Removal in Supracondylar Humerus Fractures: A Retrospective Cohort Study.](#)

Zusman NL, Barney NA, Halsey MF, Yang S.

J Am Acad Orthop Surg. 2020 Jan 15;28(2):e71-e76. doi: 10.5435/JAAOS-D-18-00415.

PMID: 31149973

[Obese Children Have Different Forearm Fracture Characteristics Compared With Normal-weight Children.](#)

Li Y, James C, Byl N, Sessel J, Caird MS, Farley FA, Robbins C.

J Pediatr Orthop. 2020 Feb;40(2):e127-e130. doi: 10.1097/BPO.0000000000001402.

PMID: 31095010

[A Prospective, Median 15-Year Comparison of Ponseti Casting and Surgical Treatment of Clubfoot.](#)

Recordon JAF, Halanski MA, Boocock MG, McNair PJ, Stott NS, Crawford HA.

J Bone Joint Surg Am. 2021 Nov 3;103(21):1986-1995. doi: 10.2106/JBJS.20.02014.

PMID: 34547011

## Additional File 1

[Does the use of ultrasound guidance during percutaneous Achilles tendon tenotomy improve outcomes of clubfoot management? A randomized controlled trial.](#)

Kumar P, Baburaj V, Bist O, Belludi PS, Sudesh P.

J Pediatr Orthop B. 2022 Mar 1;31(2):e190-e194. doi: 10.1097/BPB.0000000000000934.

PMID: 34751177 Clinical Trial.

[Is capsulorrhaphy a necessary step during open reduction of developmental dysplasia of the hip? A randomized controlled trial.](#)

Badawy MY, Afifi A, Shaker ES, Elbarbary H, Hegazy M, Mohamed MT, Arafa A.

Int Orthop. 2022 Mar;46(3):589-596. doi: 10.1007/s00264-021-05267-z. Epub 2021 Nov 24.

PMID: 34817631 Clinical Trial.

[Is modified reverse step-cut osteotomy better than Yun's reverse V osteotomy in paediatric cubitus varus deformity correction? A prospective, double-blinded, randomized controlled trial.](#)

Kumar R, Rangasamy K, Raj Gopinathan N, Sudesh P, Goni VG.

Int Orthop. 2022 Sep;46(9):2041-2053. doi: 10.1007/s00264-022-05429-7. Epub 2022 May 10.

PMID: 35536366 Clinical Trial.

[The foot external rotation above-knee \(FERAK\) brace versus the Denis Browne brace for management of idiopathic clubfoot following Ponseti casting: a randomized controlled trial.](#)

Hegazy M, El Barbary H, Hammoud M, Arafa A, Mohamed MT, Barakat AS, Afifi A. Int Orthop. 2022 Feb;46(2):313-319. doi: 10.1007/s00264-021-05107-0. Epub 2021 Jun 13. PMID: 34120232 Clinical Trial.

[An exploratory randomized controlled trial comparing wood-composite and synthetic fibreglass splint systems for the immobilization of paediatric upper limb fractures.](#) Martynov I, Klink T, Slowik V, Stich R, Zimmermann P, Engel C, Lacher M, Boehm R. Bone Joint J. 2020 Oct;102-B(10):1405-1411. doi: 10.1302/0301-620X.102B10.BJJ-2020-0236.R3. PMID: 32993326 Clinical Trial.

[Short and long-arm fiberglass cast immobilization for displaced distal forearm fractures in children: a randomized controlled trial.](#) Seiler M, Heinz P, Callegari A, Dreher T, Staubli G, Aufdenblatten C. Int Orthop. 2021 Mar;45(3):759-768. doi: 10.1007/s00264-020-04800-w. Epub 2020 Sep 17. PMID: 32940750 Free PMC article. Clinical Trial

[Single-bone versus both-bone plating of unstable paediatric both-bone forearm fractures. A randomized controlled clinical trial.](#) Khaled M, Fadle AA, Attia AK, Sami A, Hafez A, Abol Oyoum N. Int Orthop. 2022 Jan;46(1):105-114. doi: 10.1007/s00264-021-05097-z. Epub 2021 Jun 12. PMID: 34120195 Free PMC article. Clinical Trial

[Two-stage anterior and posterior fusion versus one-stage posterior fusion in patients with Scheuermann's kyphosis.](#) McDonnell JM, Ahern DP, Lui DF, Yu H, Lehovsky J, Noordeen H, Molloy S, Butler JS, Gibson A. Bone Joint J. 2020 Oct;102-B(10):1368-1374. doi: 10.1302/0301-620X.102B10.BJJ-2020-0273.R3. PMID: 32993336

## Additional File 1

**Table . Spin classification for non-randomized studies assessing therapeutic interventions. Examples provided are from manuscripts and published abstract and full-texts. *Lazarus et al., 2015* (<http://creativecommons.org/licenses/by/4.0/>)**

Category of spin	Strategy used	Definition	Example
Misleading reporting	Not reporting adverse events or lack of focus on harm	Results are reported without warnings on important or relevant safety issue.	"This trial showed that overnight switch from oral ropinirole to transdermal rotigotine, with a dose conversion ratio of 1.5:1, was well tolerated in Korean patients with no apparent loss of efficacy." 45/116 experienced adverse events and 13 stopped treatments because of adverse events.
	Selective reporting	Only a subset of the original outcomes or analysis planned in a study is fully reported.	"The results suggest that [Internet-based cognitive therapy] ICBT with therapist support has the potential to reduce [obsessive-compulsive disorders] OCD symptoms, depressive symptoms and general functioning". No report of the lack of improvement in quality of life.
	Misleading description of study design	Study design is presented as more robust than it is actually.	"Based on this prospective case control study tranexamic acid seems not to have a benefit in posterior lumbar spine surgery." It was a retrospective study involving 97 patients and nothing was prospective in this study.
	Use of linguistic spin	Any word or expression emphasizing the beneficial effect of the therapeutic intervention	"Both operative methods could be performed safely in the early stages after the introduction of surgery and could consistently obtain excellent surgical performance."
	No consideration of the limitations	Important limitations are not taken into account in the interpretation of the results.	"The TABADO program, targeting teenagers in vocational schools, was effective in producing a higher 12-month abstinence rate among all smokers in the intervention group." No adjustment was made on major confounding variables.
	Selective citation of other studies	Only previous studies concordant with the current study findings are acknowledged or other important studies in the field are not reported.	"It would be interesting to know its efficacy and safety in correcting high myopic astigmatism and how it changes the shape of the cornea." Several publications already exist in this field.
Inadequate interpretation	Claim an effect for non-statistically significant results	Therapeutic intervention is presented as effective despite a non-statistically significant result.	"The use of [Automated CardioPulmonary Resuscitation] A-CPR resulted in a higher rate of survival to hospital compared with [Conventional CardioPulmonary Resuscitation] CPR" in a restrospective study involving 66 patients where the propensity score adjusted Odds Ratio was 1.69 [0.79; 3.63].

## Additional File 1

Category of spin	Strategy used	Definition	Example
	Claim an equivalence for non-statistically significant results despite a wide confidence interval	Therapeutic intervention and comparator are presented as equivalent when a comparison test is not statistically significant with a large confidence interval.	"The authors concluded that: 1) mortality during follow-up was statistically similar for both groups; (...)" In this retrospective cohort study involving 352 patients, the survival rate at 20 year was 69.3 % with mechanical mitral valve substitutes and 56.6 % with biological substitutes. The hazard ratio was not statistically significant but had a wide 95 % confidence interval (HR = 1.21 [0.79; 1.86], $p = 0.386$ ).
	Ruling out safety for non-statistically significant results	Therapeutic intervention is presented as safe based on a non-statistically significant comparison test, despite a large confidence interval.	"Long-term treatment with esomeprazole (20 mg once daily) is well tolerated and efficacious" despite 16.29 % of patients ( $n = 22$ ) experiencing adverse events judged to be possibly related to treatment with esomeprazole (mostly mild and transient).
	Causal language or causal claim	Results are presented with a sentence implying a cause-and-effect link between the intervention and the outcome	"Treatment with oral valacyclovir as the sole antiviral therapy resulted in complete resolution of retinitis." This was a before-after study involving 10 patients.
	Claim of any significant difference despite lack of statistical test	Therapeutic intervention and comparator are compared despite no proper statistical test reported.	"pH and $\text{HCO}_3^-$ significantly increased after hemodialysis sessions with both aspirin only and aspirin + dipyridol, the increase of pH and $\text{HCO}_3^-$ with aspirin only was significantly larger than aspirin + dipyridol." No statistical test was reported.
	Focus on statistical significance instead of clinical relevance	Results are presented by their statistical significance without considering the clinical relevance of the effect size.	"While the [Clinical Global Impression-Schizophrenia] CGI-SCH overall score improved in both groups after switching, there was a significantly greater change in those who switched from olanzapine (difference of 0.29 points, $p = 0.013$ ). The CGI-SCH scale range from 0 to 7.
Inadequate extrapolation	Inadequate extrapolation to	Results are generalized to another population, intervention or outcome	"This intervention approach has the potential to impact on the progression of colorectal cancers and other cancers or chronic diseases." The intervention focused on colorectal cancers only.

## Additional File 1

Category of spin	Strategy used	Definition	Example
	larger population, intervention or outcome	than those of the study (such as surrogate outcomes)	
	Inadequate implication for clinical practice	Authors recommend the use of the therapeutic intervention for clinical practice.	"One should not hesitate to perform an osteotomy in difficult cases." in a prospective cohort study involving 109 patients.