CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

EVIDENCE SUMMARY

PIP Joint Arthritis

title: “PIP Joint Arthritis” slug: pipj-arthritis region: hand audience: patient mesh_terms: [“Osteoarthritis”, “Finger Joint”, “Arthritis, Rheumatoid”, “PIPJ arthritis”, “proximal interphalangeal arthritis”, “finger joint arthritis”] article_count: 174 model_used: qwen3.5-35b-a3b-q8 generated_at: ‘2026-05-18T13:43:42+00:00’ key_articles: - title: “Surface Replacement Arthroplasty of the Proximal Interphalangeal Joint Using a Volar Approach: Case Series” ref_num: 1 evidence_tier: paper evidence_level: 4 doi: 10.1016/j.jhsa.2011.03.003 year: 2011 - title: “Prosthetic Arthroplasty of Proximal Interphalangeal Joints for Treatment of Osteoarthritis and Posttraumatic Arthritis: Systematic Review and Meta-Analysis Comparing the Three Ulnar Digits With the Index Finger” ref_num: 2 evidence_tier: paper evidence_level: 1 doi: 10.1177/1558944718791186 year: 2018 - title: “Trends in Primary Proximal Interphalangeal Joint System and Revisions for Osteoarthritis of the Hand in the Medicare Database” ref_num: 3 evidence_tier: paper evidence_level: 4 doi: 10.1177/1558944719837009 year: 2019 - title: “Anatomically Neutral Silicone Small Joint Arthroplasty for Osteoarthritis” ref_num: 4 evidence_tier: paper evidence_level: 4 doi: 10.1016/j.jhsa.2008.11.005 year: 2009 - title: “Type of Work and Preoperative Ability to Perform Work Affect Return to Usual Work Following Proximal Interphalangeal Joint Arthroplasty for Osteoarthritis” ref_num: 5 evidence_tier: paper evidence_level: 3 doi: 10.1177/15589447221141485 year: 2022 - title: “Effects of serial casting in the treatment of flexion contractures of proximal interphalangeal joints in patients with rheumatoid arthritis and juvenile idiopathic arthritis: A retrospective study” ref_num: 6 evidence_tier: paper evidence_level: 4 doi: 10.1016/j.jht.2015.11.005 year: 2016 - title: “National Prevalence of Complications and Cost of Small Joint Arthroplasty for Hand Osteoarthritis and Post-Traumatic Arthritis” ref_num: 7 evidence_tier: paper evidence_level: 3 doi: 10.1016/j.jhsa.2019.11.002 year: 2020 - title: “Arthroplasty of the Proximal Interphalangeal Joint With the TACTYS Prosthesis: Clinical and Radiographic Results With a Mean Follow-up of 5 Years” ref_num: 8 evidence_tier: paper evidence_level: 4 doi: 10.1177/15589447211030962 year: 2022 - title: “Pyrolytic Carbon Hemiarthroplasty for Proximal Interphalangeal Joint Arthritis, Long-Term Follow-Up” ref_num: 9 evidence_tier: paper evidence_level: 4 doi: 10.1016/j.jhsa.2023.11.007 year: 2024 - title: “Proximal interphalangeal joint arthroplasty: current trends and evidence-based practice” ref_num: 10 evidence_tier: paper evidence_level: 4 doi: 10.1177/17531934241265837 year: 2024 - title: “Outcomes of Surface Replacement Proximal Interphalangeal Joint Arthroplasty Using the Self Locking Finger Joint Implant: Minimum Two Years Follow-up” ref_num: 11 evidence_tier: paper evidence_level: 4 doi: 10.1177/1558944717726136 year: 2017 - title: “Posttraumatic Osteoarthritis of the Distal Interphalangeal Joint: A Follow-Up Study of 12 Years After Nonsurgical Treatment of Mallet Finger Fractures” ref_num: 12 evidence_tier: paper evidence_level: 4 doi: 10.1016/j.jhsa.2023.03.027 year: 2023 - title: “Proximal

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Interphalangeal Joint Silicone Arthroplasty for Osteoarthritis: Midterm Outcomes" ref_num: 13 evidence_tier: paper evidence_level: 4 doi: 10.1177/1558944718769427 year: 2018 - title: "Reconstruction of finger joints using autologous rib perichondrium – an observational study at a single Centre with a median follow-up of 37 years" ref_num: 14 evidence_tier: paper evidence_level: 4 doi: 10.1186/s12891-020-03310-5 year: 2020 - title: "Surface Replacement Arthroplasty Using a Volar Approach for Osteoarthritis of Proximal Interphalangeal Joint: Results After a Minimum 5-Year Follow-up" ref_num: 15 evidence_tier: paper evidence_level: 4 doi: 10.1177/1558944718787332 year: 2018 - title: "Pyrolytic Carbon Hemiarthroplasty in the Management of Proximal Interphalangeal Joint Arthritis" ref_num: 16 evidence_tier: paper evidence_level: 4 doi: 10.1016/j.jhsa.2014.12.016 year: 2015 - title: "Visual detection of cortical breaks in hand joints: reliability and validity of high-resolution peripheral quantitative CT compared to microCT" ref_num: 17 evidence_tier: paper evidence_level: 4 doi: 10.1186/s12891-016-1148-y year: 2016 - title: "Delphi consensus of risk factors for development and progression of finger interphalangeal joint osteoarthritis" ref_num: 18 evidence_tier: paper evidence_level: 4 doi: 10.1177/1753193419865872 year: 2019 - title: "Ten years' experience with a pyrocarbon prosthesis replacing the proximal interphalangeal joint. A prospective clinical and radiographic follow-up" ref_num: 19 evidence_tier: paper evidence_level: 4 doi: 10.1177/1753193413479527 year: 2013 - title: "Prediction of Wrist Prognosis in Patients With Early Rheumatoid Arthritis According to Radiographic Classification" ref_num: 20 evidence_tier: paper evidence_level: 2 doi: 10.1016/j.jhsa.2009.01.016 year: 2009 - title: "Impaired intrinsic hand strength in women with osteoarthritis" ref_num: 21 evidence_tier: paper evidence_level: 3 doi: 10.1016/j.jht.2024.02.005 year: 2024 - title: "Thumb Basal Joint Arthritis" ref_num: 22 evidence_tier: paper evidence_level: 5 doi: 10.5435/jaaos-d-17-00374 year: 2018 - title: "A three-dimensional finite element analysis of finger joint stresses in the MCP joint while performing common tasks" ref_num: 24 evidence_tier: paper evidence_level: 5 doi: 10.1007/s11552-012-9430-4 year: 2012 - title: "Finger Deformities Caused by Rheumatoid Arthritis" ref_num: 27 evidence_tier: paper evidence_level: 4 doi: 10.2106/00004623-195739030-00006 year: 1957 - title: "Linking ICF components to outcome measures for hand osteoarthritis and rheumatoid arthritis: A systematic review" ref_num: 30 evidence_tier: paper evidence_level: 2 doi: 10.1016/j.jht.2019.12.015 year: 2020 - title: "THE ABJS 2005 NICOLAS ANDRY AWARD: Osteoarthritis and Injury at the Base of the Human Thumb" ref_num: 31 evidence_tier: paper evidence_level: 5 doi: 10.1097/01.blo.0000176968.28247.5c year: 2005 - title: "Comparison of finger kinematics between patients with hand osteoarthritis and healthy participants with and without joint protection programs" ref_num: 32 evidence_tier: paper evidence_level: 3 doi: 10.1016/j.jht.2020.10.010 year: 2022 - title: "Current Concepts of the Anatomy of the Thumb Trapeziometacarpal Joint" ref_num: 33 evidence_tier: paper evidence_level: 5 doi: 10.1016/j.jhsa.2010.10.029 year: 2011 - title: "Laboratory Diagnosis of Rheumatoid Arthritis" ref_num: 35 evidence_tier: paper evidence_level: 5 doi: 10.1016/j.jhsa.2011.01.036 year: 2011 - title: "Effects of the Deep Anterior Oblique and Dorsoradial Ligaments on Trapeziometacarpal Joint Stability" ref_num: 36 evidence_tier: paper evidence_level: 5 doi: 10.1016/j.jhsa.2006.12.002 year: 2007 - title: "The Coordination of Finger-Joint Motions" ref_num: 39 evidence_tier: paper evidence_level: 5 doi: 10.2106/00004623-196345080-00007 year: 1963 - title: "Proximal Interphalangeal Joint Arthritis" ref_num: 40 evidence_tier: paper evidence_level: 5 doi: 10.1016/j.jhsa.2010.09.002 year: 2010 - title: "Simultaneous anterograde screw arthrodesis of distal interphalangeal joint and silastic proximal interphalangeal joint replacement for osteoarthritis" ref_num: 41 evidence_tier: paper evidence_level: 4 doi: 10.1177/17531934231215790 year: 2023 - title: "TWO TO FIVE YEAR FOLLOW-UP OF THE LPM CERAMIC COATED PROXIMAL INTERPHALANGEAL JOINT ARTHROPLASTY" ref_num: 43 evidence_tier: paper evidence_level: 4 doi: 10.1177/1753193407087864

year: 2008 - title: “Arthrodesis of distal interphalangeal and thumb interphalangeal joint: a retrospective cohort study of 149 cases” ref_num: 44 evidence_tier: paper evidence_level: 3 doi: 10.1186/s12891-024-07361-w year: 2024 - title: “Surface Replacement Arthroplasty of the Proximal Interphalangeal Joint Using the SR PIP Implant: Long-Term Results” ref_num: 45 evidence_tier: paper evidence_level: 4 doi: 10.1016/j.jhsa.2014.11.015 year: 2015 - title: “Arthrodesis of the proximal interphalangeal joint of the finger – a systematic review” ref_num: 47 evidence_tier: paper evidence_level: 1 doi: 10.1530/eor-21-0102 year: 2022 - title: “Thumb Base Involvement in Established Hand Osteoarthritis” ref_num: 49 evidence_tier: paper evidence_level: 3 doi: 10.1016/j.jht.2014.01.006 year: 2014 synthesis_version: “v2” verifier_status: skipped

Overview

- Surface replacement arthroplasty of the proximal interphalangeal joint using a volar approach can result in excellent range of motion, function, and pain relief with minimal complications in active patients with osteoarthritis or posttraumatic arthritis [1].
- Treatment of the long finger may be a relative contraindication to proximal interphalangeal joint arthroplasty [2].
- There has been an increased use of primary proximal interphalangeal joint arthroplasty utilization for patients with osteoarthritis, whereas revision proximal interphalangeal joint arthroplasty has decreased [3].
- Treatment of metacarpophalangeal and proximal interphalangeal joint osteoarthritis with an anatomically neutral implant can provide reliable, long-term pain relief and maintenance of function [4].
- Patients returned to work after a median of 8 weeks following proximal interphalangeal joint arthroplasty [5].
- Serial casting is an effective method to correct flexion contractures in proximal interphalangeal joints in selected patients with arthritis [6].
- Minimizing postoperative complications after metacarpophalangeal and proximal interphalangeal joint arthroplasty is one avenue to decrease health care costs [7].
- Proximal interphalangeal joint implant arthroplasty is a good and reliable option for symptomatic proximal interphalangeal joint degenerative, post-traumatic, or inflammatory arthritis given the proper clinical setting [10].
- Minimum two years of follow-up evaluation of the self-locking finger joint implant proximal interphalangeal joint arthroplasty demonstrated good pain relief and good overall patient satisfaction while maintaining joint range of motion [11].
- Silicone arthroplasty for osteoarthritis of the proximal interphalangeal joint remains a good option for pain relief [13].
- Pyrolytic carbon hemiarthroplasty appears to be a viable alternative to total joint arthroplasty in the treatment of proximal interphalangeal joint arthritis [16].

Anatomy & Pathophysiology

- Women with hand osteoarthritis exhibited significantly lower intrinsic hand forces compared to healthy women, with a mean decrease of 30% across most force types [21].
- People with hand arthritis move through a smaller arc of motion when performing some functional tasks as compared with controls [32].
- The internal structure and material properties of the phalanges play a significant role in both the magnitude and distribution of stresses in the MCP joint during common tasks [24].
- Interdependency of joints is a primary feature of finger function [39].
- The function of a muscle with respect to a certain joint cannot be inferred from the position of the muscle with respect to that one joint alone due to tendons bridging multiple joints [39].
- Changes occurring in the tendons and related structures are the most important factor in the development of finger deformities, especially in early stages [27].
- Detailed understanding of the functional anatomy and related pathologic features of the trapeziometacarpal joint complex provides the basis for treatment of acquired afflictions at the base of the human thumb [31].
- Compressive shear forces can lead over time to trapeziometacarpal joint osteoarthritis [33].
- In most degrees of freedom of metacarpal movement relative to the trapezium, the dorsoradial ligament (DRL) is relatively more important than the deep anterior oblique ligament (dAOL) in providing stability to the TMC joint [36].
- Thumb basal joint arthritis is a progressive disease with substantial new biomechanical and longitudinal clinical studies changing prevailing opinions on serial degenerative changes [22].
- Type I and III wrists had radiographic progression and ultimately underwent deformation [20].
- Most of the outcome measures associated with hand OA or RA are related to body structures and body functions or activity limitations and participation restrictions [30].

Classification

- Surface replacement arthroplasty of the proximal interphalangeal joint using a volar approach can result in excellent range of motion, function, and pain relief with minimal complications in active patients with osteoarthritis or posttraumatic arthritis [1].
- Treatment of the long finger may be a relative contraindication to proximal interphalangeal joint arthroplasty [2].
- Primary proximal interphalangeal joint arthroplasty utilization has increased for patients with osteoarthritis, whereas revision utilization has decreased [3].
- Treatment of metacarpophalangeal and proximal interphalangeal joint osteoarthritis with an anatomically neutral implant can provide reliable, long-term pain relief and maintenance of function [4].

- Patients returned to work after a median of 8 weeks following proximal interphalangeal joint arthroplasty [5].
- Serial casting is an effective method to correct flexion contractures in proximal interphalangeal joints in selected patients with arthritis [6].
- Minimizing postoperative complications after metacarpophalangeal and proximal interphalangeal joint arthroplasty is one avenue to decrease health care costs [7].
- The TACTYS prosthesis should be proposed exceptionally if the proximal interphalangeal joint arthritis causes invalidating functional pain [8].
- Proximal interphalangeal joint implant arthroplasty is a good and reliable option for symptomatic proximal interphalangeal joint degenerative, post-traumatic, or inflammatory arthritis given the proper clinical setting [10].
- Radiological osteoarthritis after a mallet finger fracture is similar to the natural degenerative process in the distal interphalangeal joint and is accompanied by a decrease in range of motion of the distal interphalangeal joint, which does not clinically affect patient-reported outcome measures [12].
- Pyrolytic carbon hemiarthroplasty appears to be a viable alternative to total joint arthroplasty in the treatment of proximal interphalangeal joint arthritis [16].
- Cortical breaks were commonly visualized in metacarpophalangeal and proximal interphalangeal joints with high-resolution peripheral quantitative CT and microCT [17].
- Expert consensus can be reached to identify putative risk factors for interphalangeal joint osteoarthritis, though the number identified was low and often required multiple Delphi rounds [18].
- The revision rate for the LPM prosthesis was higher than in published series for other proximal interphalangeal joint implants, warranting close surveillance of all patients with this prosthesis currently in situ [43].
- Surface replacement arthroplasty using the SR PIP implant continues to be an option for patients with osteoarthritis of the proximal interphalangeal joint [45].

Clinical Presentation

- PIP joint arthroplasty may be a relative contraindication for treatment of the long finger [2].
- Patients with PIP joint arthritis causing invalidating functional pain should be considered for arthroplasty [8].
- PIPJ implant arthroplasty is a good and reliable option for symptomatic PIPJ degenerative, post-traumatic, or inflammatory arthritis given the proper clinical setting [10].
- Treatment of MCP and PIP osteoarthritis with an anatomically neutral implant can provide reliable, long-term pain relief and maintenance of function [4].
- Silicone arthroplasty for osteoarthritis of the PIP remains a good option for pain relief [13].

- Surface replacement arthroplasty of the PIP joint using a volar approach can result in excellent range of motion, function, and pain relief with minimal complications in active patients with osteoarthritis or posttraumatic arthritis [1].
- Surface replacement arthroplasty of the PIP joint using a volar approach has the tendency to deteriorate in range of motion with longer follow-up [15].
- Pyrolytic carbon hemiarthroplasty for PIP joint arthritis results in good pain relief and stable radiographic integration at 5 years, with no late revisions or loosening observed, despite no improvement in range of motion [19].
- Patients should be advised that PIPJ range of motion deteriorates over time following pyrolytic carbon hemiarthroplasty [9].
- Minimum two-year follow-up evaluation of the Self Locking Finger Joint (SLFJ) implant PIP joint arthroplasty demonstrated good pain relief and good overall patient satisfaction while maintaining joint range of motion [11].
- Autologous rib perichondrium transplants restored injured PIP and MCP joints that remained essentially pain-free and mostly well-functioning without need for additional surgeries up to 41 years after the procedure [14].
- Serial casting is an effective method to correct flexion contractures in PIP joints in selected patients with arthritis [6].
- Cortical breaks were commonly visualized in MCP and PIP joints with high-resolution peripheral quantitative CT and microCT [17].
- Expert consensus can be reached to identify putative risk factors for IP joint osteoarthritis, though the number identified was low and often required multiple Delphi rounds [18].
- Treatment modalities for PIP joint arthritis are currently limited, and the disease process involves a complex interplay of biochemical, metabolic, and genetic factors rather than simple mechanical stress [40].
- Early diagnosis of rheumatoid arthritis is important, and referral to a rheumatologist followed by treatment with disease-modifying antirheumatic agents has been shown to improve outcomes [35].

Investigations

- The volar approach to proximal interphalangeal joint surface replacement arthroplasty can result in excellent range of motion, function, and pain relief with minimal complications in active patients with osteoarthritis or posttraumatic arthritis [1].
- Treatment of the long finger may be a relative contraindication to proximal interphalangeal joint arthroplasty [2].
- There has been an increased use of primary proximal interphalangeal joint implant arthroplasty utilization for patients with osteoarthritis, whereas revision utilization has decreased [3].
- Treatment of metacarpophalangeal and proximal interphalangeal joint osteoarthritis with an anatomically neutral implant can provide reliable, long-term pain relief and maintenance of function [4].

- Patients returned to work after a median of 8 weeks following proximal interphalangeal joint arthroplasty [5].
- Serial casting is an effective method to correct flexion contractures in proximal interphalangeal joints in selected patients with arthritis [6].
- Proximal interphalangeal joint implant arthroplasty should be proposed exceptionally if the joint arthritis causes invalidating functional pain [8].
- Patients should be advised that proximal interphalangeal joint range of motion deteriorates over time following pyrolytic carbon hemiarthroplasty [9].
- Proximal interphalangeal joint implant arthroplasty is a good and reliable option for symptomatic proximal interphalangeal joint degenerative, post-traumatic, or inflammatory arthritis given the proper clinical setting [10].
- Radiological osteoarthritis after a mallet finger fracture is similar to the natural degenerative process in the distal interphalangeal joint and is accompanied by a decrease in range of motion of the distal interphalangeal joint, which does not clinically affect patient-reported outcome measures [12].
- Silicone arthroplasty for osteoarthritis of the proximal interphalangeal joint remains a good option for pain relief [13].
- Perichondrium transplants restored injured proximal interphalangeal and metacarpophalangeal joints that remained essentially pain-free and mostly well-functioning without need for additional surgeries up to 41 years after the procedure [14].
- Proximal interphalangeal joint range of motion after surface replacement arthroplasty through a volar approach has the tendency to deteriorate with a longer follow-up [15].
- Cortical breaks were commonly visualized in metacarpophalangeal and proximal interphalangeal joints with high-resolution peripheral quantitative CT and microCT [17].
- Expert consensus can be reached to identify putative risk factors for interphalangeal joint osteoarthritis, though the number identified was low and often required multiple Delphi rounds [18].
- Pyrolytic carbon prosthesis replacement of the proximal interphalangeal joint reports good pain relief and stable radiographic integration at 5 years, with no late revisions or loosening observed, despite no improvement in range of motion [19].
- Type I and III wrists had radiographic progression and ultimately underwent deformation [20].
- All described techniques for proximal interphalangeal joint arthrodesis can achieve the goal of fusing an osteoarthritic joint [47].
- In patients with established hand osteoarthritis, clinical involvement of the thumb base joint is associated with a higher clinical burden, whereas radiological involvement of the thumb base joint is associated with older age and more structural abnormalities [49].

Treatment

- Surface replacement arthroplasty of the proximal interphalangeal joint using a volar approach can result in excellent range of motion, function, and pain relief with minimal complications in active patients with osteoarthritis or posttraumatic arthritis [1].
- Treatment of the long finger may be a relative contraindication to proximal interphalangeal joint arthroplasty [2].
- There has been an increased use of primary proximal interphalangeal joint arthroplasty utilization for patients with osteoarthritis, whereas revision proximal interphalangeal joint arthroplasty has decreased [3].
- Treatment of metacarpophalangeal and proximal interphalangeal joint osteoarthritis with an anatomically neutral implant can provide reliable, long-term pain relief and maintenance of function [4].
- Patients returned to work after a median of 8 weeks following proximal interphalangeal joint arthroplasty [5].
- Serial casting is an effective method to correct flexion contractures in proximal interphalangeal joints in selected patients with arthritis [6].
- Minimizing postoperative complications after metacarpophalangeal and proximal interphalangeal joint arthroplasty is one avenue to decrease health care costs [7].
- The TACTYS prosthesis should be proposed exceptionally if the proximal interphalangeal joint arthritis causes invalidating functional pain [8].
- Patients should be advised that proximal interphalangeal joint range of motion deteriorates over time following pyrolytic carbon hemiarthroplasty [9].
- Proximal interphalangeal joint implant arthroplasty is a good and reliable option for symptomatic proximal interphalangeal joint degenerative, post-traumatic, or inflammatory arthritis given the proper clinical setting [10].
- Minimum two years of follow-up evaluation of the Self Locking Finger Joint implant proximal interphalangeal joint arthroplasty demonstrated good pain relief and good overall patient satisfaction while maintaining joint range of motion [11].
- Silicone arthroplasty for osteoarthritis of the proximal interphalangeal joint remains a good option for pain relief [13].
- Proximal interphalangeal joint range of motion after surface replacement arthroplasty through a volar approach has the tendency to deteriorate with a longer follow-up [15].
- Pyrolytic carbon hemiarthroplasty appears to be a viable alternative to total joint arthroplasty in the treatment of proximal interphalangeal joint arthritis [16].
- The combination of distal interphalangeal joint arthrodesis and proximal interphalangeal joint Swanson arthroplasty resulted in a favourable outcome in terms of simultaneous bony union and flexibility [41].

Complications

- Treatment of the long finger may be a relative contraindication to PIPJ arthroplasty [2].
- Minimizing postoperative complications after MCP and PIP joint arthroplasty is one avenue to decrease health care costs [7].
- Patients should be advised that PIPJ range of motion deteriorates over time [9].
- Diabetes and surgeon experience were identified as factors increasing the risk of postoperative complications in DIP and thumb IP joint arthrodeses [44].

Recovery

- Patients returned to work after a median of 8 weeks following PIP arthroplasty [5].
- Minimizing postoperative complications after MCP and PIP joint arthroplasty is one avenue to decrease health care costs [7].
- Patients should be advised that PIPJ ROM deteriorates over time [9].
- The minimum 2 years of follow-up evaluation of the SLFJ implant PIP joint arthroplasty demonstrated good pain relief and good overall patient satisfaction while maintaining joint range of motion [11].
- Perichondrium transplants restored injured PIP and MCP joints that remained essentially pain-free and mostly well-functioning without need for additional surgeries up to 41 years after the procedure [14].
- PIP ROM after SRA through a volar approach has the tendency to deteriorate with a longer follow-up [15].
- The study reports good pain relief and stable radiographic integration at 5 years, with no late revisions or loosening observed, despite no improvement in range of motion [19].

Key Evidence

- [L4] The volar approach to PIP SRA can result in excellent range of motion, function, and pain relief with minimal complications in active patients with osteoarthritis or posttraumatic arthritis. (10.1016/j.jhsa.2011.03.003)
- [L1] Treatment of the long finger may be a relative contraindication to PIPJ arthroplasty. (10.1177/1558944718791186)
- [L4] The data demonstrate an increased use of primary PIPA utilization for patients with OA, whereas revision PIPA decreased. (10.1177/1558944719837009)
- [L4] Treatment of MCP and PIP osteoarthritis with an anatomically neutral implant can provide reliable, long-term pain relief and maintenance of function. (10.1016/j.jhsa.2008.11.005)
- [L3] Patients returned to work after a median of 8 weeks following PIP arthroplasty. (10.1177/15589447221141485)

- [L4] SC is an effective method to correct flexion contractures in PIP joints in selected patients with arthritis. (10.1016/j.jht.2015.11.005)
- [L3] Minimizing postoperative complications after MCP and PIP joint arthroplasty is one avenue to decrease health care costs. (10.1016/j.jhsa.2019.11.002)
- [L4] It should be proposed exceptionally if the PIP joint arthritis causes invalidating functional pain. (10.1177/15589447211030962)
- [L4] Patients should be advised that PIPJ ROM deteriorates over time. (10.1016/j.jhsa.2023.11.007)
- [L4] PIPJ implant arthroplasty is a good and reliable option for symptomatic PIPJ degenerative, post-traumatic or inflammatory arthritis given the proper clinical setting. (10.1177/17531934241265837)
- [L4] The minimum 2 years of follow-up evaluation of the SLFJ implant PIP joint arthroplasty demonstrated good pain relief and good overall patient satisfaction while maintaining joint range of motion. (10.1177/1558944717726136)
- [L4] Radiological OA after an MFF is similar to the natural degenerative process in the DIP joint and is accompanied by a decrease in range of motion of the DIP joint, which does not clinically affect PROMs. (10.1016/j.jhsa.2023.03.027)
- [L4] Silicone arthroplasty for osteoarthritis of the PIP remains a good option for pain relief. (10.1177/1558944718769427)
- [L4] Perichondrium transplants restored injured PIP and MCP joints that remained essentially pain-free and mostly well-functioning without need for additional surgeries up to 41 years after the procedure. (10.1186/s12891-020-03310-5)
- [L4] PIP ROM after SRA through a volar approach has the tendency to deteriorate with a longer follow-up. (10.1177/1558944718787332)
- [L4] Pyrocarbon hemiarthroplasty appears to be a viable alternative to total joint arthroplasty in the treatment of PIP joint arthritis. (10.1016/j.jhsa.2014.12.016)
- [L4] Cortical breaks were commonly visualized in MCP and PIP joints with HR-pQCT and microCT. (10.1186/s12891-016-1148-y)
- [L4] Expert consensus can be reached to identify putative risk factors for IP joint OA, though the number identified was low and often required multiple Delphi rounds. (10.1177/1753193419865872)
- [L4] The study reports good pain relief and stable radiographic integration at 5 years, with no late revisions or loosening observed, despite no improvement in range of motion. (10.1177/1753193413479527)
- [L2] Type I and III wrists had radiographic progression and ultimately underwent deformation. (10.1016/j.jhsa.2009.01.016)
- [L3] Women with hand osteoarthritis exhibited significantly lower intrinsic hand forces compared to healthy women, with a mean decrease of 30% across most force types. (10.1016/j.jht.2024.02.005)
- [L5] Thumb basal joint arthritis is a progressive disease with substantial new biomechanical and longitudinal clinical studies changing prevailing opinions on serial degenerative changes. (10.5435/jaaos-d-17-00374)

- [L5] The internal structure and material properties of the phalanges were found to play a significant role in both the magnitude and distribution of stresses. (10.1007/s11552-012-9430-4)
- [L4] The most important factor in the development of finger deformities is the changes occurring in the tendons and related structures, especially in early stages. (10.2106/00004623-195739030-00006)
- [L2] Most of the outcome measures associated with hand OA or RA are related to body structures and body functions or activity limitations and participation restrictions. (10.1016/j.jht.2019.12.015)
- [L5] Detailed understanding of the functional anatomy and related pathologic features of the trapeziometacarpal joint complex provides the basis for treatment of acquired afflictions at the base of the human thumb and a model for the more general study of idiopathic osteoarthritis. (10.1097/01.blo.0000176968.28247.5c)
- [L3] This study demonstrated that people with hand arthritis move through a smaller arc of motion when performing some functional tasks as compared with the controls, and that with instruction on joint protection techniques, participants made significant changes in the amount of movement used to perform tasks, which supports a proof of principle of joint protection. (10.1016/j.jht.2020.10.010)
- [L5] The resulting compressive shear forces can lead over time to trapeziometacarpal joint osteoarthritis. (10.1016/j.jhsa.2010.10.029)
- [L5] Early diagnosis of rheumatoid arthritis is important, and referral to a rheumatologist followed by treatment with disease-modifying antirheumatic agents has been shown to improve outcomes. (10.1016/j.jhsa.2011.01.036)
- [L5] In most degrees of freedom of metacarpal movement relative to the trapezium, the DRL is relatively more important than the dAOL in providing stability to the TMC joint. (10.1016/j.jhsa.2006.12.002)
- [L5] The paper concludes that interdependency of joints is a primary feature of finger function, and that the function of a muscle with respect to a certain joint cannot be inferred from the position of the muscle with respect to that one joint alone due to tendons bridging multiple joints. (10.2106/00004623-196345080-00007)
- [L5] Treatment modalities for proximal interphalangeal joint arthritis are currently limited, and the disease process involves a complex interplay of biochemical, metabolic, and genetic factors rather than simple mechanical stress. (10.1016/j.jhsa.2010.09.002)
- [L4] The combination of DIP arthrodesis and PIP Swanson arthroplasty resulted in a favourable outcome in terms of simultaneous bony union and flexibility. (10.1177/17531934231215790)
- [L4] The revision rate for the LPM prosthesis was higher than in published series for other PIP joint implants, with close surveillance of all patients with this prosthesis currently in situ recommended. (10.1177/1753193407087864)
- [L3] Diabetes and surgeon experience were identified as factors increasing the risk of postoperative complications in these DIP/thumb IP joint arthrodeses. (10.1186/s12891-024-07361-w)
- [L4] Surface replacement arthroplasty using the SR PIP implant continues to be an option for patients with osteoarthritis of the PIP joint. (10.1016/j.jhsa.2014.11.015)
- [L1] All described techniques can achieve the goal of fusing an osteoarthritic joint. (10.1530/eor-21-0102)

- [L3] In patients with established hand OA clinical involvement of the TBJ is associated with a higher clinical burden whereas radiological involvement of the TBJ is associated with older age and more structural abnormalities. (10.1016/j.jht.2014.01.006)

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