

Orthopaedic Research Library

Research associated with Mr Peyman Bakhshayesh, MD, PhD, MBA

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12

Published studies

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Working manuscripts

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Research proposals

About this catalogue

This selected catalogue brings together reviewed research on major trauma, fracture reconstruction, anatomical imaging, elective orthopaedics and regenerative care. Earlier drafts that correspond to published studies are grouped with their published records.

How to read the status labels

Published research links to an identified journal or bibliographic record. A published conference abstract is identified separately from a complete journal paper. Working manuscripts and proposals are described with their present verification limits; they are not presented as peer-reviewed publications.

Project summaries

The six accompanying downloads are research summaries, not full manuscripts. Where extraction records, references, analysis or authorship require confirmation, they describe the question and proposed methods without repeating unvalidated numerical findings.

Research findings apply to the populations and methods studied. This catalogue is educational and does not provide a personal prognosis, treatment recommendation or substitute for a clinical assessment.

Journal publications

01 Volume fusion of CT images to measure femoral symmetry

Published research

Small anatomical imaging study using ten adult CT datasets to compare mirrored femurs. Supports investigation of the opposite femur as a planning template, while sample size and anatomical variation limit generalisation.

Publisher version of record 28 November 2019; Surg Radiol Anat 42, 635-639 (2020).

[DOI: 10.1007/s00276-019-02389-3](https://doi.org/10.1007/s00276-019-02389-3)

02 Three Dimensional Quality Assessments of Applied Pelvic Binders

Published research

A retrospective registry study assessing pelvic binder placement using reconstructed CT images. It examines the quality of emergency fracture stabilisation.

Bull Emerg Trauma. 2019 Apr;7(2):156-161; PMID 31198805.

[DOI: 10.29252/beat-070211](https://doi.org/10.29252/beat-070211)

03 A New CT Based Method for Post-operative Motion Analysis of Pelvic Fractures

Published research

Laboratory study compares CT bone registration and tantalum-marker registration in a pelvic fracture model. Clinical follow-up applications are exploratory in this source.

3D Research. 2019;10:7. Published 29 January 2019.

[DOI: 10.1007/s13319-019-0217-z](https://doi.org/10.1007/s13319-019-0217-z)

Journal publications

04 The pelvic fracture - Indicator of injury severity or lethal fracture?

Published research

Observational trauma study examining whether pelvic fracture independently predicts mortality or reflects the wider severity of injury.

Injury. 2018;49(8):1568-1571. PMID: 29909925.

[Read the published record](#)

05 A novel 3D technique to assess symmetry of hemi pelvises

Published research

Imaging study of ten CT datasets assessing pelvic symmetry using mirroring and merging. It explores contralateral templating for reconstruction.

Scientific Reports 10, 18789 (2020), published 2 November 2020.

[DOI: 10.1038/s41598-020-75884-y](https://doi.org/10.1038/s41598-020-75884-y)

06 Factors affecting mortality and reoperations in high-energy pelvic fractures

Published research

A Swedish registry study of high-energy pelvic and acetabular injuries examining mortality predictors and reoperations. These cohort findings are research context rather than a personal complication-rate estimate.

Eur J Orthop Surg Traumatol. 2018 Oct;28(7):1273-1282; DOI 10.1007/s00590-018-2203-1; PMID 29675632.

[DOI: 10.1007/s00590-018-2203-1](https://doi.org/10.1007/s00590-018-2203-1)

Journal publications

07 A novel technique to assess rotational deformities in lower extremities using CT-based motion analysis

Published research

A digital CT-based anatomical study investigates assessment of lower-leg rotational deformity. Its findings support further evaluation of 3D registration methods for reconstruction planning; it does not replace individualized clinical and imaging assessment.

Scientific Reports 11, 21123 (2021), published 26 October 2021.

[DOI: 10.1038/s41598-021-00532-y](https://doi.org/10.1038/s41598-021-00532-y)

08 Experience and availability of pelvic binders at Swedish trauma units: a nationwide survey

Published research

A nationwide survey examines availability of pelvic binders and clinicians' experience and knowledge of their use. It addresses emergency trauma systems and training.

Bulletin of Emergency & Trauma 2018;6(3):221-225.

[DOI: 10.29252/beat-060306](https://doi.org/10.29252/beat-060306)

09 Predictors of extended length of stay after unicompartmental knee arthroplasty

Published research

A retrospective study examines factors associated with a longer hospital stay after unicompartmental knee arthroplasty. It provides research context for perioperative planning, rather than a personalized risk estimate.

Journal of Clinical Orthopaedics and Trauma. 2020;11(Suppl 2):S239-S245. Published online 11 September 2019.

[DOI: 10.1016/j.jcot.2019.09.009](https://doi.org/10.1016/j.jcot.2019.09.009)

Journal publications

10 Should we routinely perform a postoperative haemoglobin check following unicompartmental knee arthroplasty?

Published research

A retrospective case series evaluates postoperative haemoglobin monitoring after unicompartmental knee arthroplasty. The research addresses testing decisions in a defined surgical cohort.

The Knee 2020;27(1):249-256.

[DOI: 10.1016/j.knee.2019.10.002](https://doi.org/10.1016/j.knee.2019.10.002)

11 Intramedullary Fibular Nail Versus Plate Fixation for Adult Lateral Malleolus (Fibula) Fractures: A Systematic Review and Meta-Analysis

Published research

A systematic review compares intramedullary fibular nails with plate fixation for adult lateral malleolus fractures, considering complications and functional outcomes. Peyman Bakhshayesh is a coauthor.

Cureus 2025;17(12):e100074, published 25 December 2025. Relationship to the distinct archived review The Matter of Fibula Nail is unverified.

[DOI: 10.7759/cureus.100074](https://doi.org/10.7759/cureus.100074)

12 Effectiveness of non-invasive external pelvic compression: a systematic review of the literature

Published research

A systematic review assesses the efficacy and safety of pelvic circumferential compression devices in polytrauma with pelvic injuries. Peyman Bakhshayesh is a coauthor.

Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine 2016;24:73.

[DOI: 10.1186/s13049-016-0259-7](https://doi.org/10.1186/s13049-016-0259-7)

Manuscripts under development

13 Possibility of one single incision in acetabular fracture surgery

Working manuscript - publication status unverified

A computational planning study explores whether different acetabular fracture patterns can be reduced and fixed through a single surgical exposure. It uses virtual fracture models and simulated screw trajectories, rather than a clinical comparison of patient outcomes.

A virtual fracture-planning manuscript is available. A matching journal publication has not been verified.

Verification needed: Verify current authorship, final version, image permissions, submission history and subsequent publication before releasing the full manuscript.

14 Ultrasound targeting accuracy for platelet-rich plasma injections

Submission manuscript - publication status unverified

A working review examining the accuracy and precision of ultrasound targeting and the spread of PRP after musculoskeletal injection. Accurate delivery and proven improvements in patient symptoms are distinct questions.

The source is labelled as submitted to the Journal of Orthopaedics, Trauma and Rehabilitation; submission and the journal decision have not been independently verified.

Verification needed: Verify the included-study list, exact PRISMA search and screening records, reference accuracy, independent extraction, and journal decision before sharing a full systematic review.

15 Ultrasound-guided versus landmark-guided PRP: clinical outcomes

Working manuscript - publication status unverified

A draft systematic review asks whether ultrasound guidance changes pain, function or safety outcomes compared with landmark-guided PRP injection. The source reports very limited direct comparative evidence; anatomical targeting accuracy and clinical benefit are separate questions.

A research draft is available. A matching journal publication has not been verified.

Verification needed: The source explicitly calls the forest plot a placeholder, contains incomplete reference fields and source-reference markers, and needs a reproducible search, study verification and data audit.

Manuscripts under development

16 BMAC for subchondral bone and osteochondral healing

Working manuscript - publication status unverified

A working review exploring bone marrow aspirate concentrate delivered to subchondral bone for osteochondral repair. It considers clinical, technical and translational reports; treatment-effect claims await verification of the underlying evidence.

A draft cover letter is present. Submission, acceptance and publication have not been verified.

Verification needed: Reconcile conflicting citations and claims, distinguish trial protocols from completed studies, verify eligibility and study counts, and audit the extraction table and search records.

17 PRP, shockwave therapy and physiotherapy for plantar fasciitis

Working manuscript - publication status unverified

This working evidence synthesis compares PRP and extracorporeal shockwave therapy with conventional physiotherapy for persistent plantar heel pain. It considers pain, function and imaging outcomes, alongside differences in treatment preparation and rehabilitation.

An evidence-synthesis draft is available. A matching journal publication has not been verified.

Verification needed: Several references have missing volume/page fields. The draft mixes RCTs and published meta-analyses; verify the claimed PRISMA counts, avoid double counting, and confirm analysis methods and effect sizes from original extraction records.

18 Shockwave therapy versus physiotherapy for Achilles tendinopathy

Incomplete working manuscript - publication status unverified

A working systematic review considers whether shockwave therapy alone or alongside exercise improves Achilles tendinopathy outcomes. It separates insertional from midportion disease and identifies substantial variation in treatment protocols and study findings.

The abstract contains an unresolved participant-count placeholder and the study table includes empty extraction fields.

Verification needed: Resolve the total sample size, complete the extraction table, verify all included trials and risk-of-bias assessments, and recalculate the pooled effects. No numerical pooled benefit is presented in this public summary.

Manuscripts under development

19 A biomechanical classification of partial articular pilon and atypical ankle fractures

Early working concept - publication status unverified

An early concept document proposes describing selected distal tibial fracture patterns using hyperflexion or hyperextension combined with foot pronation or supination. It also considers how fracture mechanics might guide positioning and operative access.

An early research concept is available; formal validation and publication have not been verified.

Verification needed: The source lacks a completed methods section, sample size, results, reproducibility analysis, byline and formal validation. Confirm authorship before releasing the full document.

20 Comparative outcomes of ankle fusion and total ankle replacement

Working manuscript - publication status unverified

A draft cohort manuscript compares ankle fusion, primary total ankle replacement and revision replacement. The related study protocol plans patient-reported functional assessment and review of complications and satisfaction.

The draft names Hossam Abdalaziz, Francis Irem-Okoro and Peyman Bakhshayesh. Institutional details and study years are placeholders, and the companion protocol uses a different principal outcome measure.

Verification needed: Reconcile the protocol and manuscript outcomes, verify the data and statistics, complete dates and institutional details, confirm author approval and ethics/service-evaluation documentation. Patient lists and identifiable records are excluded.

21 COVID-19 measures and orthopaedic surgical site infections

Working full manuscript; conference abstract published

An observational study examining surgical site infections and readmissions before and during COVID-19 infection-control measures. A related conference abstract is published; publication of the full manuscript remains unverified.

A related poster abstract was published in BJS 2022;109(Supplement 6), DOI 10.1093/bjs/znac269.090. This does not establish publication of the complete Drive manuscript.

Verification needed: Check cohort totals and dates, reconcile manuscript and abstract, verify final analysis and submission history. Its study percentages are not this surgeon's current personal complication rates.

[DOI: 10.1093/bjs/znac269.090](https://doi.org/10.1093/bjs/znac269.090)

Manuscripts under development

22 Technical tips on semi-prone positioning in posterior malleolus ankle fracture fixation

Working technical manuscript - publication status unverified

A technical manuscript describes semi-prone positioning to obtain posterior ankle access while considering operative setup and pressure protection. It is an operative technical description, rather than a comparative patient outcomes study or general rehabilitation instruction.

The source names Francis Irem-Okon MD MPH and Peyman Bakhshayesh MD PhD. A subsequent journal publication has not yet been verified.

Verification needed: Confirm the final manuscript, source references, image permissions, author approval and journal publication or submission history before releasing original images or asserting outcome benefits.

23 A novel sinus tarsi approach enabling standard calcaneal plate fixation for calcaneal fractures

Working manuscript - publication status unverified

A technical manuscript describes a modified limited approach for applying a standard lateral calcaneal plate. Its early case series provides a technique description rather than evidence of comparative benefit.

The title page names Tania Tanello, Ahmed Yousef and Peyman Bakhshayesh. An archive cover letter is addressed to the Journal of Foot and Ankle Surgery; publication has not been verified.

Verification needed: Confirm final data, ethical and image approvals, references, author agreement and submission history. A small uncontrolled case series cannot establish lower complication rates.

24 Do current Lisfranc classification systems guide treatment and prognosis?

Working manuscript - publication status unverified

A critical narrative review examines how Lisfranc classifications describe injury, support treatment decisions and predict recovery. It considers validity, reliability and the limits of morphology-based categories.

The archive source contains alternative titles and has no author byline. A matching journal publication has not been verified.

Verification needed: Agree final title and authorship; verify references and classification claims; document review methods and distinguish proposed principles from validated prognostic tools.

Manuscripts under development

25 Lag screw entry point and greater trochanter-neck-head alignment in intertrochanteric fracture nailing

Working manuscript - publication status unverified

A technical review discusses greater trochanter anatomy, lag screw trajectory and operative planning during intramedullary fixation of intertrochanteric fractures.

An archive review manuscript was examined. No byline or reliable matching publication was established.

Verification needed: Confirm authorship, source references, terminology and image permissions. Separate technical reasoning from claims about clinical outcomes that require comparative evidence.

26 Strengths and limitations of medial column plate fixation in progressive collapsing foot deformity

Working manuscript - publication status unverified

A working review considers indications, fixation strategy, union and complications of medial column fusion in progressive collapsing foot deformity. Related archive notes discuss naviculocuneiform and talonavicular fusion.

The formatted manuscript includes Peyman Bakhshayesh's byline. Its publication status is unverified; related archive review notes have no byline.

Verification needed: Audit study selection, extracted data, pooled analyses and reference identities; reconcile claimed study counts and complete figures and contact placeholders before publishing results.

27 The matter of fibula nail: indications, benefits and limitations

Working manuscript - publication status unverified

An archived working review discusses when fibular nails may be considered and how their wound, fixation and functional tradeoffs compare with plating.

The source carries Peyman Bakhshayesh's byline. It differs substantially from the verified 2025 Cureus review in byline, search methods and included studies; their relationship is unverified.

Verification needed: Reconcile sample totals, verify study designs and reference identities, complete the systematic review audit and clarify relationship to the published review before releasing numerical findings.

Manuscripts under development

28 Intramedullary nailing versus plate fixation for distal tibia fractures

Working manuscript - publication status unverified

A working evidence review compares intramedullary nailing and plating for distal tibia fractures, considering healing, wound complications, infection and postoperative loading.

An archived draft claims analysis of investigator-supplied studies, but author byline and publication status were not established.

Verification needed: Verify the full search and eligibility record, reference identity, extracted data, effect calculations and bias assessment before publishing pooled results.

29 Evaluation of stem stability in periprosthetic femoral fractures

Working manuscript - publication status unverified

A working review examines how implant stability, fracture morphology and cement or bone integrity affect assessment of periprosthetic femoral fractures. It discusses the limitations of existing classifications.

The reviewed archive manuscript has no author byline; a current publication match has not been verified.

Verification needed: Confirm authorship, complete editorial and reference review, distinguish established diagnostic methods from proposed tests and substantiate treatment claims.

30 Tips and tricks for minimally invasive reduction of tibial plateau fractures

Working manuscript - publication status unverified

A technical draft describes indirect fluoroscopic reduction and fixation of selected tibial plateau fractures while limiting soft tissue exposure. It is a technique report rather than a validated comparative outcome study.

The title page names Hossam Abdalaziz, Sadia Afzal and Peyman Bakhshayesh. A cover letter dated 19 May 2025 states that the work had not been published elsewhere at that time; its current publication status is unverified.

Verification needed: Confirm the final manuscript and title, ethics, images, references, author agreement and submission history. Assertions of reduced morbidity or day-case suitability require appropriate outcome evidence.

Manuscripts under development

31 Immediate weight bearing following ankle and hindfoot fusion

Working manuscript - publication status unverified

A working review examines whether earlier loading after selected ankle and hindfoot fusion procedures affects union, complications and recovery. It asks a research question and does not prescribe a general postoperative loading schedule.

The reviewed archive manuscript has no byline. A reliable matching publication was not established.

Verification needed: Audit eligibility, definition of immediate loading, union criteria, study selection, data extraction and pooled analysis. Account for procedure and patient selection before interpreting comparisons.

32 Comparative analysis of ankle fusion techniques

Working manuscript - publication status unverified

A working review compares plate fixation, intramedullary nails, circular external fixation and arthroscopic fusion, considering union, function and complications across different surgical indications.

An archive cover letter dated 21 May 2025 names Peyman Bakhshayesh and Yasir Raufi and is addressed to Foot and Ankle International. Submission or publication status has not been confirmed.

Verification needed: Complete figure placeholders, verify study identities and extracted data, audit pooled analyses and address selection differences between techniques before publishing numerical comparisons.

33 Comparative efficacy of internal fixation techniques for femoral neck fractures

Working manuscript - publication status unverified

A working review considers cannulated screws, buttress plating, a femoral neck system and locking plates for femoral neck fractures, with attention to function and complications.

The reviewed archive manuscript has no byline. Its publication status and claimed pooled findings were not verified.

Verification needed: Confirm authorship and review provenance; verify search methods, study identities, extraction tables and forest plots before publishing comparative findings.

Studies in development

34 CT Motion Analysis in Evaluation of Fracture Healing Following TSF Treatment

Research proposal - completion and publication unverified

A proposed laboratory validation of low-dose CT and CT motion analysis, followed by a clinical series after Taylor Spatial Frame treatment. The research question is whether measured motion can help evaluate fracture union; completed study results have not been verified.

Source uses future tense, and states: "The final results are unknown awaiting research to be done."

Verification needed: Check current project status and investigators; no completed results are evidenced.

35 Functional outcomes after reconstruction for progressive collapsing foot deformity

Study protocol - completion and publication unverified

A study protocol proposes evaluating patient-reported outcomes after subtalar fusion or heel osteotomy with medial column stabilization for progressive collapsing foot deformity. It uses the Manchester-Oxford Foot Questionnaire, complications, reoperations and satisfaction.

A planned outcomes study is described. Design and outcome measures require reconciliation across related source documents.

Verification needed: Finalize dates, reconcile prospective versus retrospective design and outcome measures, verify actual enrolment and data, and confirm formal classification and permissions. No cohort success rate or ethical approval number is asserted here.

36 Weight-bearing strategy and outcomes after operative Lisfranc injury

Preliminary study protocol - no analysed results

A preliminary ten-year retrospective cohort protocol examines whether postoperative weight-bearing strategy is associated with wound healing, infection, return to work and reoperation after Lisfranc surgery. It also proposes studying how injury classification relates to fixation planning.

The source is dated 3 June 2026, names Mr Peyman Bakhshayesh and Mr Ahmad Eldoseki, and explicitly states that the dataset has not yet been provided for analysis.

Verification needed: Finalize institutional governance, define exposures and endpoints, clean and review the dataset and imaging, complete statistical analysis and report limitations from confounding and missing data. Planned cohort size is not a verified analysed sample.

Studies in development

37 Circular frame, plate and nail fixation in distal third tibial fractures

Research proposal - no analysed results

A proposed systematic review would compare circular frames, plates and intramedullary nails for distal third tibial fractures, with attention to union, complications and functional recovery.

The source sets out future search, registration, data extraction and analysis steps. It does not establish completed study results.

Verification needed: Confirm authorship, register and finalize the protocol, specify fracture eligibility and loading definitions, complete reproducible searches and assess bias before analysis.

38 SCOPE: low-dose CT assessment of periprosthetic femoral fractures

Research proposal - no analysed results

A prospective study proposal explores whether CT-based motion analysis can help assess hip stem stability and femoral integrity after a periprosthetic fracture. This is an investigational diagnostic question.

The protocol lists Hemant Pandit, Jeya Palan, Peyman Bakhshayesh, Henrik Olivecrona, Olof Sandberg and Richard Fawcett. Related archive documents describe the same study concept; completed results and publication have not been verified.

Verification needed: Finalize governance and ethics, assess patient safety and feasibility, standardize the reference test and acquisition protocol, and complete analysis before treating the proposed assessment as validated clinical practice.

39 Surgical reconstruction and classification in progressive collapsing foot deformity

Research proposal - no analysed results

An early systematic review outline proposes studying patient-reported function, pain, radiographic correction, complications and revision after surgical reconstruction for progressive collapsing foot deformity.

The native document is explicitly marked DRAFT and includes unresolved intervention and outcome questions. It contains literature notes rather than completed review results.

Verification needed: Confirm authorship, finalize the review question and registration, distinguish cited literature from original findings and complete screening, extraction and risk-of-bias assessment.

Catalogue reviewed on 10 October 2026. A manuscript filename, proposed journal or draft cover letter does not establish publication. Bibliographic status and full manuscript completeness should be updated when new records are available.