INPLASY PROTOCOL

To cite: Okay et al. The clinical outcomes and current evidence in the surgical treatment of extremity-located fibrous dysplasia. Inplasy protocol 202350020. doi: 10.37766/inplasy2023.5.0020

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The clinical outcomes and current

evidence in the surgical treatment of

extremity-located fibrous dysplasia

Received: 04 May 2023

Published: 04 May 2023

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Support: None.

Review Stage at time of this submission: The review has not yet started.

Conflicts of interest: None declared. Review question / Objective: What are clinical outcomes and current evidence in the surgical treatment of extremity-located fibrous dysplasia?

Condition being studied: Fibrous dysplasia is the fibroosseous lesion of tissue where normal bone tissue is replaced by collagen fibroblast and varying amounts of osteoid cells which is caused by GNAS gene mutation. Surgery aims to correct deformities and avoid limb length discrepancies in symptomatic cases. Available options include curettage, grafting, corrective osteotomies, and using fixation materials. There is a need for an optimal surgical treatment.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 04 May 2023 and was last updated on 04 May 2023 (registration number INPLASY202350020).

INTRODUCTION

Review question / Objective: What are clinical outcomes and current evidence in the surgical treatment of extremity-located fibrous dysplasia?

Condition being studied: Fibrous dysplasia is the fibro-osseous lesion of tissue where

normal bone tissue is replaced by collagen fibroblast and varying amounts of osteoid cells which is caused by GNAS gene mutation. Surgery aims to correct deformities and avoid limb length discrepancies in symptomatic cases. Available options include curettage, grafting, corrective osteotomies, and using

fixation materials. There is a need for an optimal surgical treatment.

METHODS

Search strategy: PubMed, Cochrane, Embase will be searched using Title & Abstract, Keywords, Topic, emtrees, and meshterms. References for this review were identifi ed by searching PubMed, Cochrane, Embase using the search terms related to fi brous dysplasia. The search of these online databases will have English language restriction without publication or year restriction. Relevant systematic reviews will be screened to identify additional papers of relevance that may have been missed during the database search process. Cross Checking of references included studies will be performed.

Participant or population: Extremity-located fibrous dysplasia.

Intervention: Surgery of the extremity.

Comparator: None.

Study designs to be included: All types of clinical studies will be included.

Eligibility criteria: Inclusion criteria: Fibrous Dysplasia patients with extremity location Exclusion criteria: foreign language.

Information sources: PubMed, Cochrane, and Embase will be searched using Title & Abstract, Keywords, Topic, emtrees, and mesh terms. References for this review were identified by searching PubMed, Cochrane, and Embase using the search terms related to fibrous dysplasia. The search of these online databases will have English language restriction without publication or year restriction. Relevant systematic reviews will be screened to identify additional papers of relevance that may have been missed during the database search process. Cross Checking of references in included studies will be performed.

Main outcome(s): Main outcomes will be:

- clinical outcome measures
Measures of effect.

Data management: Deduplication will be performed by a reference manager. The included studies will be uploaded to Rayyan online software. Two authors will conduct independent title abstract screening and Rob assessment. Disagreement will be solved by a third author when necessary.

Quality assessment / Risk of bias analysis: Study quality will be assessed by The MINORS (Methodological Index for Non-Randomized Studies) criteria. Evidence will be assesed by GRADE system.

Strategy of data synthesis: If appropriate, a descriptive analysis will be performed using SPSS software.

Subgroup analysis: No subgroups or subsets will be analyzed.

Sensitivity analysis: None.

Language restriction: English literature will be included.

Country(ies) involved: Turkey; United States of America.

Keywords: fibrous dysplasia; extremity; surgery.

Dissemination plans: It will be published as review article.

Contributions of each author:

Author 1 - ERHAN OKAY - Prepared the protocol. He will perform deduplication with software, title abstract screening, rob analysis, write the manuscript, revise the protocol.

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Author 2 - KORHAN OZKAN - Prepared the protocol. He will perform deduplication with software, title abstract screening, rob analysis, write the manuscript, and revise the protocol.

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Author 4 - Alexandre Arkader - He will interpret data and revise manuscript.

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Author 5 - Souroush Baghdadi - Prepared the protocol. He will solve discrepancies during title abstract screening and Rob analysis, revise the manuscript, and revise the protocol.

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