

INPLASY

Impacts caused by patients sequelae of COVID-19 in orthopedic care: scoping review and formulation of a care protocol proposal

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Wanderley, SQ; Macedo Filho, AT; Maia, ML; Laureano, JHS.

Corresponding author:

Sesiom Quinino Wanderley

sesiqw@hotmail.com

Author Affiliation:

Setor de Ortopedia e Traumatologia,
Hospital de Mangabeira, João
Pessoa, PB, Brazil.

ADMINISTRATIVE INFORMATION

Support - No financial support.

Review Stage at time of this submission - Preliminary searches.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 13 September 2024 and was last updated on 13 September 2024.

INTRODUCTION

Review question / Objective To what extent is there a need to change orthopedic care for patients sequelae of covid-19 admitted to orthopedic hospitals and clinics?

Background The COVID-19 pandemic has brought about decisive changes in people's actions and behaviors, especially with regard to orthopedic care due to the sequelae caused by the virus in patients affected by the disease. In this sense, reviewing the literature on such impacts will serve to provide a better understanding of how to act in situations similar to those faced during the COVID-19 pandemic.

Rationale The growing recognition of musculoskeletal complications in post-COVID-19 patients highlights the need to address chronic

pain, joint stiffness, and mobility issues that affect their quality of life. While much attention has been focused on respiratory and cardiovascular sequelae, orthopedic impacts remain underexplored. This research aims to bridge that gap by providing a structured review of the literature and developing a care protocol that offers targeted strategies for optimizing rehabilitation and improving patient outcomes in orthopedic settings.

METHODS

Strategy of data synthesis The strategy for data synthesis involves a comprehensive review and integration of findings from selected studies on orthopedic complications in post-COVID-19 patients. Relevant data from each study will be extracted, categorized, and analyzed to identify common themes, trends, and gaps related to musculoskeletal impacts, treatment approaches,

and patient outcomes. Qualitative and quantitative results will be synthesized to provide a holistic understanding of the orthopedic challenges faced by these patients. This process will support the formulation of a care protocol that is evidence-based and aligned with current clinical practices in orthopedic care.

Eligibility criteria The eligibility criteria will include studies that focus on patients who experienced musculoskeletal or orthopedic complications as a result of COVID-19. Only peer-reviewed articles, clinical trials, observational studies, and case reports published in English will be considered. Studies must specifically address post-COVID-19 sequelae affecting the musculoskeletal system, such as joint pain, mobility restrictions, or inflammatory conditions. Exclusion criteria will involve research unrelated to orthopedic care, studies not involving human subjects, and articles without sufficient data on post-COVID-19 orthopedic impacts.

Source of evidence screening and selection

The source of evidence screening and selection will follow a structured process using electronic databases such as PubMed, Scopus, and Web of Science. After identifying relevant studies through keyword searches related to post-COVID-19 orthopedic complications, duplicates will be removed. Titles and abstracts will be screened for relevance, and full-text articles of potentially eligible studies will be assessed based on the inclusion criteria. Two independent reviewers will conduct the screening process to ensure accuracy and consistency, resolving any disagreements through discussion or consultation with a third reviewer if necessary.

Data management Data management will involve organizing and storing all extracted information in a secure database using software like Excel or reference management tools such as EndNote. The extracted data will include study characteristics, patient demographics, types of musculoskeletal complications, treatment approaches, and outcomes. A standardized data extraction form will be used to ensure consistency across studies. All data will be backed up regularly, and access will be limited to the research team to maintain confidentiality. Any discrepancies during data extraction will be resolved through discussion, and a third reviewer will be consulted if necessary.

Reporting results / Analysis of the evidence The reporting of results will follow the PRISMA guidelines to ensure transparency and clarity. Data

will be synthesized both qualitatively and quantitatively, with results presented in tables and narrative form to highlight the key findings related to musculoskeletal complications, treatment approaches, and patient outcomes in post-COVID-19 orthopedic care. Descriptive statistics will summarize patient characteristics, types of complications, and intervention effectiveness, while thematic analysis will identify common patterns and gaps in the literature. The analysis will aim to provide evidence-based insights that inform the development of a care protocol, focusing on improving clinical outcomes and rehabilitation strategies for affected patients.

Presentation of the results The results will be presented through a structured approach that includes a summary of key findings, visual aids such as tables and graphs, and a detailed narrative analysis. The summary will highlight the prevalence and types of orthopedic complications experienced by post-COVID-19 patients, along with the effectiveness of various treatment approaches. Visual aids will help in illustrating data trends and patient outcomes, making it easier to interpret the evidence. The narrative analysis will provide an in-depth discussion of common themes and patterns identified across studies, addressing any discrepancies and offering insights into the overall impact of COVID-19 on orthopedic care. Finally, the results will be linked to practical recommendations for developing a care protocol to improve patient management and outcomes in orthopedic settings.

Language restriction No languages restriction.

Country(ies) involved Brazil - Setor de Ortopedia e Traumatologia, Hospital de Mangabeira, João Pessoa, PB, Brazil.

Keywords Orthopaedics; COVID-19; Sequelae; Rehabilitation.

Dissemination plans Dissemination plans will involve presenting the research findings through multiple channels to reach a broad audience. The results will be shared in academic journals and conferences focused on orthopedic care, COVID-19 sequelae, and rehabilitation. Additionally, a summary of the findings will be presented at relevant professional meetings and webinars to engage with practitioners directly. The research will be made available through institutional repositories and platforms like Inplasy to ensure accessibility. Collaboration with professional organizations and healthcare networks will be sought to promote the findings

and implement the proposed care protocol into clinical practice.

Contributions of each author

Author 1 - Sesiom Quinino Wanderley - Idealizing the work and carrying out the initial searches.

Email: sesiqw@hotmail.com

Author 2 - Abel Tenorio de Macedo Filho - Idealizing the work and carrying out the initial searches.

Email: abeltmfilho@hotmail.com

Author 3 - Marcelo Lopes Maia - Idealizing the work and carrying out the initial searches.

Email: maiamarcelo@hotmail.com