

One Third of Knee Replacements Classified as Inappropriate

Introduction

New research reports that more than one third of total knee replacements in the U.S. were classified as "inappropriate" using a patient classification system developed and validated in Spain. Highlights the need for consensus on patient selection criteria among U.S. medical professionals treating those with the potential need of knee replacement surgery [1].

The Agency for Healthcare Research and Quality reports more than 600,000 knee replacements are performed in the U.S. each year. In the past 15 years, the use of total knee arthroplasty has grown significantly, with studies showing an annual volume increase of 162% in Medicare-covered knee replacement surgeries between 1991 and 2010. Some experts believe the growth is due to use of an effective procedure, while others contend there is over-use of the surgery that relies on subjective criteria [2].

Description

The present study, examined the criteria used to determine the appropriateness of total knee arthroplasties. To my knowledge, ours is the first U.S. study to compare validated

appropriateness criteria with actual cases of knee replacement surgery.

A modified version of the appropriateness classification system developed along with the Western Ontario and McMaster Universities Arthritis Index (WOMAC) Pain and Physical Function scales were used to assess participants enrolled in the Osteoarthritis Initiative - a prospective 5-year study funded in part by the National Institutes of Health (NIH) [3]. There were 175 subjects who underwent total knee replacement surgery, and were classified as appropriate, inconclusive, or inappropriate [4].

The mean age of knee replacement patients was 67 years and 60% of the group was female. Analyses show that 44% of surgeries were classified as appropriate, 22% as inconclusive, and 34% deemed inappropriate. The characteristics of patients undergoing surgery were varied [5].

Conclusion

Our finding that one third of knee replacements were inappropriate was higher than expected and linked to variation in knee pain OA severity and functional loss. These data highlight the need to develop patient selection criteria in the U.S.

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Received: 08-Aug-2022, Manuscript No. IJCR-22-139; Editor assigned: 09-Aug-2022, **PreQC No.** IJCR-22-139(PQ); **Reviewed:** 22-Aug-2022, QC No. IJCR-22-139; **Revised:** 27-Aug-2022, Manuscript No. IJCR-22-139(R); **Published:** 02-Sep-2022; **DOI:** 10.37532/1758-4272.2022.17(8).139-140

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