

Title:

Clinical and Functional Outcomes After Reverse Total Shoulder Arthroplasty with Associated Latissimus Dorsi Transfer: A Systematic Review

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Background:

RTSA has gained in popularity as well as the understanding of the indications for latissimus dorsi transfer. Thus, it is necessary to characterize the current state of the literature regarding clinical outcomes for this procedure. The purpose of this study is to evaluate the findings of all relevant publications assessing the outcomes of rTSA with associated latissimus dorsi transfer.

The primary objective is to assess patient functional outcomes such as elevation and external rotation, as well as to assess the acute and chronic complications and their risk factors for patients receiving a latissimus dorsi transfer with their rTSA.

Methods:

The Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) checklist items were adhered to for this systematic review and meta-analysis. For our inclusion criteria, we

included any study that contained functional outcome scores for postoperative range of motion (such as elevation, external rotation, etc). We also included complications both postoperative and intraoperative for patients undergoing a rTSA with latissimus dorsi transfer. The aim is to provide the most up-to-date literature regarding the acute and chronic complications (such as deep surgical site infection, nervous injury, prosthetic loosening / instability, and fractures) and their risk factors for patients receiving a latissimus dorsi transfer with their rTSA.

Results:

The study contained 12 studies that assessed complications from shoulders that had rTSA with latissimus dorsi transfer, with a total sample of 217 shoulders. As a result, we found the most common complication to occur was neuropraxia and postoperative fractures (4.1%). Of the complications that caused the most revisions were postoperative fractures (28%, 7/25) and infections (28%, 7/25). The revision rate was found to be 11.5%.

Discussion:

This systematic review found that revision RTSA with a latissimus dorsi transfer has a high overall complication and re-intervention rates, specifically for fractures and infection.