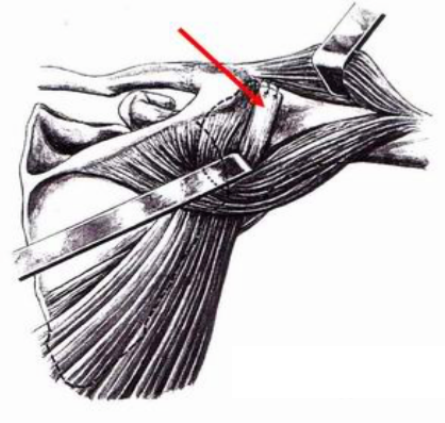
Transfer of the latissimus dorsi muscle is considered a surgical option in the treatment of younger patients without glenohumeral arthritis and with functional deficits caused by an irreparable posterior-superior rotator cuff tear.
The Latissimus Dorsi tendon attachment is transferred from the medial intertubercular groove of the humerus to the superior greater tuberosity, changing its function from adductor, extensor, and internal rotator to a flexor, depressor and external rotator.
Factors affecting outcome include preoperative shoulder function and general strength. Post operative results are generally better if the teres minor tendon is intact.
The anticipated strength of the Latissimus Dorsi transfer side will be 75-80% of the uninvolved side.



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REHABILITATION PROTOCOL FOR LATISSIMUS DORSI TRANSFER

Physiotherapy Protocol
The following is intended to guide the patient through the post operative rehabilitation process. Each patient may still require individualised modifications to their program depending on the extent of the original injury, type of surgery performed, pain level, degree of stiffness and strength.

Operation

Date

Sling

Restrictions

Dosage 1-2 daily

0-2 weeks

Sling all times, arm not to go below 60 abd
Scap Setting
Elbow, Wrist and Hand
NWB
Ice

2-6 weeks

Restrictions as above
PROM flex 60 + in scap plane as tolerated
ER 90 abd from neutral
NO forced stretching
NO IR, Add, Ext

6-10 weeks

Drop abduction to 0 degrees, move to immobiliser sling
Allow IR, no stretching
Gently progress to full PROM, no stretching
Graduated Assisted Active flexion supine with stick
Ext as Tolerated
Isometric Holds from Abd sling in 30 and 60 ER
Eccentric control 60-0 ER in Abd Sling
Lat Dorsi Biofeedback 30 abd (with towel) concentrating on add, then add/er isometrics and finally add/er active to encourage LD facilitation with movement. Encourage LD to work as an external rotator and depressor.
Isometric Sh exercises
Prone rowing
Shoulder shrugs
Initiate Graduated Functional Movement below shoulder height
NO carrying/ lifting, **NO** weights,**NO** Weight Bearing, **NO** forced ROM, **NO** Pulleys

10-16 Weeks

Stretch Shoulder
Allow Weight Bearing Activities
Closed and Open Chain Activities
J Curve (see video)
Light Resistance Shoulder Exercises
Optimise Biofeedback Lat Dorsi
Functional Movement above 90
Joint Mobilisations as Tolerated
Proprioception Exercises, Alphabet, Circles, Protraction
NO forced movements/ Stretches, **NO** Sports
NO Heavy Weights

16 Weeks +

Light Recreational Activity
Gentle Weight Training- Hands in sight, no wide grip, avoid cross body activity
NO Heavy Weights

General Post-Operative Goals

Weeks 1-6:
1. Control pain and inflammation.
2. Protect the integrity of the repair, by avoiding undue stress.
3. Gradually restore available pain-free PROM of the shoulder and AROM of the elbow, wrist and hand.

Weeks 6-10:
1. Restore functional PROM
2. Begin shoulder AROM
3. Retrain latissimus dorsi to function as a depressor and external rotator of the shoulder.
4. Wean from immobilizing brace.
5. Begin to encourage light activities of daily living using the involved upper extremity.

Weeks 10-24:
1. Maximize PROM and AROM in the shoulder.
2. Re-establish shoulder proprioception.
3. Begin to restore shoulder strength and stability.
4. Continue to progress latissimus dorsi retraining.
5. Continue to progress using the upper extremity in all ADL's.