The symptomatic, massive, irreparable cuff tear presenting a difficult challenge for the treating surgeon. The predictor factors for irreparable tear are high grade muscle atrophy, grade 3 above fatty infiltration of cuff muscle and acromio-humeral distance less than 7mm. Treatment options available are arthroscopic debridement, margin convergence, autograft patching, synthetic graft patching, tendon transfer, hemiarthroplasty and reverse shoulder replacement. The latissimus dorsi transfer (LD) for cuff tear is first described by Gerber 1986. This procedure constant gives good result (range 75-86%) in the literature. The LD transfer can restore the shoulder function by depress the humeral head and power the external rotation for the shoulder. The indication for LD transfer is postero-superior cuff tear, weak external rotator, AHD distance<7mm, severe pain and poor shoulder function. The absolute contraindications are subscapularis deficiency, deltoid weakness, stiff shoulder and advance cuff tear arthropathy. This procedure can be done through arthroscopic assisted or open method. Through the posterior inferior incision of the posterior axillary fold, first muscle visible on the lateral edge of the axilla is LD. The muscle is separated from the teres major through careful dissection to free the fascial connections till the 1st neuromuscular pedicle to the muscle. The LD tendon is followed distally to the humeral insertion and detached near to the bone tendon interface to gain the maximum length. The detached LD is tunnelled through the soft tissue between the posterior deltoid and teres major, under the acromium to the greater tuberosity. The anterior edge of the LD tendon is anchored to the greater tuberosity with suture anchor and the medial edge is repaired to the remnant of cuff. Postoperative the patient is on abduction pillow for 6 weeks, gradually allow full passive motion of shoulder except internal rotation and extension. Special rehabilitation program to retrain the LD to external rotate the shoulder is started 3 months after the surgery. The result of LD transfer is better in younger patient and as primary procedure.