Functional Latissimus Transfer for Upper Extremity Reconstruction: A Case Report and Review of the Literature

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Background: Upper extremity reconstruction often utilizes the Latissimus Dorsi (LD) muscle flap for its width, length, and ample blood supply. Variant flaps and techniques have been described that support the uses of this flap to suit a wide range of reconstructive needs.

Methods: We present a case in which the LD flap was used for coverage of a defect resulting from surgical resection of a sarcoma of the right upper extremity. A comprehensive literature review of the use of the LD flap for upper extremity reconstruction was performed. Articles were selected for their relevance to plastic and reconstructive surgery, and then reviewed for their discussion of the applications, benefits, and limitations of upper extremity reconstruction in plastic surgical practice.

Results: In the case presented, the LD flap was successfully employed for coverage, and in post-operative follow up, the patient was able to perform elbow flexion, extension, pronation, and supination.

Conclusions: The case study and literature review presented support the use of the LD muscle flap in repairing upper extremity defects, as it may provide for ease of coverage and improve post-operative elbow function.