

Triple Tendon Transfer for Trapezius Paralysis

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Trapezius paralysis is a relatively uncommon condition that orthopaedic surgeons may encounter. Although uncommon, trapezius paralysis is a debilitating condition associated with sequela of poor function and deconditioning. Nonsurgical management often fails, and limited surgical treatment options are available. The current Eden-Lange procedure involves tendon transfer of the levator scapulae, rhomboid major, and rhomboid minor to reconstruct the paralyzed trapezius. Although good outcomes have been reported with this technique, the pull of the levator scapulae and the rhomboids are in opposition to one other, which presents a biomechanical problem because the natural function of the trapezius is not re-created. This video presents a technique that is a modification of the Eden-Lange triple tendon transfer procedure that involves the use of suture bone bridges. The levator scapulae is transferred in the same manner as that in the original procedure; however, the rhomboids with bony bridges are transferred to a different point along the medial scapulae. Therefore, this technique better re-creates the natural pull of the fibers of the upper, middle, and lower trapezius.