

BRIDGING THE GAP - BILATERAL SUBTOTAL CLAVICULECTOMY WITH STERNECTOMY 'THE RECON NECKLACE': A CASE REPORT

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Introduction: The functions of the clavicle can be broadly divided into protective; with respect to the great vessels and brachial plexus and structural aspect; by creation of a stable platform for the upper extremity. Total and subtotal claviclectomy are rare surgical procedures yet can be done for various indications such as clavicular tumours, infection, facilitation of surgical exposure, symptomatic non-union and malunion, vascular compression, and refractory inflammatory disorders.

Discussion: We report a case of 48 year old lady with long standing multinodular goiter (~18 years) presented with recent rapid enlargement of sternal mass over the past 6 months. On examination, there was an obvious thyroid swelling over the right side, measuring 5x6cm, firm and mobile. There was also a prominent mass over upper sternum and medial aspect of bilateral clavicle of 15x14cm, hard and fixed. Chest X-ray showed huge thyroid mass with sternal and clavicular erosion confirmed by computed tomography scan(CT). She underwent total thyroidectomy, sternectomy, bilateral subtotal claviclectomy and anterior chest wall resection and reconstruction. The large clavicular defect was then reconstructed using osteocutaneous fibula free flap. Unfortunately, one week postoperatively, avulsion of superior thyroid and internal jugular vein at the anastomosis site during drain removal resulted in removal of the osteocutaneous fibula free flap. As there were no longer viable recipient vessels present, a single 3.5mm 20 hole reconstructive plate was used to bridge the area of defect. Post operatively, no depression of the shoulder girdle seen, with patient having full range of motion over bilateral shoulders.

Conclusion: Bilateral subtotal claviclectomy is rare and management poses a challenge especially if a concurrent sternectomy is done. Reconstructive plate is a viable option and can be used to maintain the stability and restore the appearance of the upper extremity.