SUMMARY

Chest wall reconstruction has presented a challenge to surgeons since parham's first description of thoracic resection in 1898. Chest wall is composed of multiple layers based on bony framework. Chest wall acts as a rigid shell for the prtection of thoracic viscera. Anatomy of the thoracic wall composed of the bony skeleton, musculature of the thoracic wall and the skin and subcutaneous tissue. Chest wall reconstruction is usually performed for one of four reasons: removal of neoplasms, eradication of entrenched infection, excision of radiation injuries, and debridment of traumatic wounds. Chest wall reconstruction is generally viewed as a procedure with two aspects: chest wall stabilization and soft tissue reconstruction. Materials used in chest wall stabilization are biological materials and alloplastic and synthetic materials. Chest wall stabilization is necessary to provide a firm surface on which to set the soft tissue flaps that will complete the reconstruction. Each of the flaps used in reconstruction of the chest wall has assets and liabilities as well as a denned arc of rotation. Transposition of any of the flaps requires precise understanding of the blood supply. Successful rotation of

any flap depends on preservation of the blood supply and prevention of any tention on the pedicle and on the margins of the flaps. Flaps for reconstruction are: pectoralis major muscle, rectus abdominus muscle, latissimus dorsi muscle, omentum, serratus anterior muscle and trapezius muscle. The growing appreciation that congenital chest wall deformities are often associated with clinical significance. Surgically correctable physiologic derangement has heightened awareness of these problems in both the medical and the surgical communities. Pectus excavatum is the most common congenital deformity of the sternum. Also, congenital disorders of the chest wall and sternum include sternal fissure, Poland's syndrome, thoracic dystrophy and pectus carinatum.