

EP-239

골수염을 동반한 폐외 결핵에서
광배근 근피판을 이용한 흉벽 재건

(Chest Wall Reconstruction Using a Latissimus Dorsi Musculocutaneous Flap in Extrapulmonary Tuberculosis with Osteomyelitis)



강동성심병원 성형외과

정지원, 김결희*, 정철훈,
장용준, 황나현

Purpose: Extrapulmonary tuberculosis of the chest wall can cause progressive soft tissue necrosis and rib osteomyelitis, leading to complex defects that are difficult to manage with conservative treatment. Radical debridement and well-vascularized soft tissue coverage are essential for infection control and durable reconstruction.

Methods: A patient was referred after excision of an enlarging left chest wall mass. Despite prior antibiotic therapy, and negative pressure wound therapy, the wound deteriorated with persistent drainage and exposure of the sternum and anterior ribs (Figure 1). Tissue biopsy confirmed extrapulmonary tuberculosis, and antituberculous medication was initiated. Repeated debridement was performed; however, the defect progressed with osteomyelitis of both third anterior ribs and the left fourth anterior rib (Figure 2). Radical debridement including resection of a 6-cm segment of the left third rib encompassing the osteomyelitic portion was performed. The pleura was not exposed, and skeletal reconstruction with plate or mesh was not required due to the limited extent of rib resection. The defect was reconstructed using a 6 × 12 cm latissimus dorsi musculocutaneous flap (Figure 3).

Results: The flap survived without vascular compromise. No recurrent infection, wound breakdown, or evidence of postoperative flail chest was observed. The patient was discharged two weeks after surgery. At the 6-month follow-up, the reconstructed chest wall remained stable, with no wound-related complications except for minor inferior scarring (Figure 4).

Conclusion: In chest wall tuberculosis complicated by osteomyelitis, infection control requires radical debridement, and durable reconstruction depends on vascularized muscle flap coverage rather than prolonged wound care alone.



Fig 1. Initial clinical photograph of the patient referred from the Department of Cardiothoracic Surgery, demonstrating chest wall necrosis

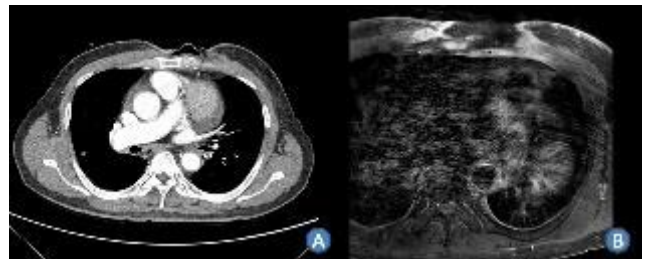


Fig 2. Intraoperative views showing V-Y advancement flap and fixation of autologous iliac bone graft to the anterior nasal spine and alar base



Fig 3. Six-month follow-up photographs demonstrating improved nasal contour, alar base, and restored structural support



Fig 4. 6-month follow up photograph demonstrating stable wound healing without recurrence of infection