

EP-199

육종 절제 후 발생한 측복부 흉벽 결손에 대한 광배근 근육 수복 및 회전 피판을 이용한 재건: 증례 보고

(Reconstruction of a Flank Chest Wall Defect After Sarcoma Resection Using Latissimus Dorsi Muscle Repair and Rotation Flap: A Case Report)



가천대학교

김재훈, 김유진*

Purpose: Wide resection of chest wall sarcomas frequently results in composite defects involving skin, muscle, and thoracic structures. Reconstruction must restore structural stability while providing reliable soft-tissue coverage. We report a case of flank sarcoma reconstructed using latissimus dorsi muscle repair combined with a rotation flap for soft-tissue coverage.

Methods: A 75-year-old male presented with a palpable right flank mass. Imaging demonstrated a heterogeneously enhancing soft-tissue tumor involving the external abdominal oblique and intercostal muscles. Core needle biopsy suggested spindle cell sarcoma. The patient underwent wide oncologic resection including the 11th and 12th ribs with diaphragmatic and peritoneal repair and mesh reinforcement by thoracic and anorectal surgeons. Following tumor removal, a 15×5 cm defect remained in the right flank. For reconstruction, the latissimus dorsi muscle was dissected and mobilized, then repaired to the residual chest wall external oblique muscle stump to reinforce the thoracoabdominal wall. Subsequently, a rotation flap measuring 17×15 cm was designed and transposed to achieve soft-tissue coverage.

Results: Final pathology confirmed undifferentiated pleomorphic sarcoma (FNCLCC grade 3) measuring 5.5×5×3 cm with rib invasion with negative surgical margins. The rotation flap survived completely without vascular compromise, and stable soft-tissue coverage with adequate chest wall support was achieved.

Conclusion: Reconstruction combining latissimus dorsi muscle repair with a rotation flap provides both structural reinforcement and reliable soft-tissue coverage. This approach can be an effective reconstructive option for flank and lower chest wall defects following oncologic resection.



Fig1. Preoperative design of a 17 × 15 cm rotation flap on the right flank for reconstruction following wide excision of the chest wall sarcoma.

Fig 2. Intraoperative view after skin and soft tissue dissection showing the latissimus dorsi muscle and the external oblique muscle stump at the defect site.



Fig3. Latissimus dorsi muscle repair to the external oblique muscle stump for reinforcement of the chest wall defect.

Fig 4. Closure of the defect with a rotation flap.