

**A challenge in soft tissue reconstruction: The use of pedicled anterolateral thigh fasciocutaneous flap and gluteal fasciocutaneous rotational flap in reconstructing a huge full thickness lateral trunk defect**

**ABSTRACT**

Introduction and importance: Lateral abdominal wall (LAW) defect presents as a rare and unique challenge to the reconstructive surgeons. Case presentation: We report a huge recurrent right lateral abdominal DFSP with local invasion in a 35-year-old lady. After wide local excision, the reconstruction was done by using pedicled anterolateral thigh fasciocutaneous flap and gluteal fasciocutaneous rotational flap. Clinical discussion: The goal of reconstruction of the lateral abdominal wall is similar to that of the anterior abdominal wall, namely to provide a static repair that will not attenuate and form a bulge or hernia over time. Anchoring a mesh to stable fixation points is expected to ensure structural integrity in the LAW defect. However, we selected fascial inset from our flaps which did not lead to hernia formation or a bulge following a 7-month postoperative review. In terms of soft tissue coverage, the pedicled anterolateral thigh fasciocutaneous flap and gluteal fasciocutaneous rotational flap were used. The standard free flap will require more complexity of works, especially if the recipient vessels for microsurgical reconstruction are remotely situated or sometimes not even available. Conclusion: Huge full-thickness LAW defect following an oncological resection can be reconstructed with combination of simpler locoregional flaps which yield good functional and aesthetic outcome.