Introduction

Latissimus dorsi (LD) myocutaneous flap can be regarded as the choice flap for autologous breast reconstruction following a mastectomy in our department. Despite uncertainty about donor-site morbidity, it is regarded as a relatively safe procedure; moreover, in contrast to our first choice, the deep inferior epigastric perforator flap, no microsurgical expertise is needed. LD breast reconstruction with skin graft is a safe choice for autologous breast reconstruction in case of unexperienced hands and where microsurgical facility are not available.

Case Presentation

A 50-year-old female diagnosed an advanced carcinoma of the right breast. After four cycles of neoadjuvent therapy, tumour size was decreased but still it was 15* 10 cm in dimension, free from chest wall, multiple ulcerations with foul smelling discharge with liver metastasis. Patient underwent a right sided total palliative mastectomy and immediate breast reconstruction with a right sided latissimus dorsi (LD) myocutaneous flap, but the defect was very large, flap and skin was opposed under tension. On seventh post operative day, it was noticed that upper flap was not apposed, there after patient was subjected for skin graft. Post operative period was uneventfull. Patient is sent into radiotherapy department for further managment.

Discussion

The latissimus dorsi (LD) flap was first described in the seventies for breast reconstruction [1]. Early attempts to increase the volume of the flap by including fascial extensions were described by Hokin in 1983 and then by Hokin and Sliverskiold in 1987 taking the whole muscle and lumbar fascia with the largest possible skin paddle running obliquely along the back. The skin paddle could be partly or wholly de-epithelialized for added volume [2,3]. In the current study, we have designed the skin paddle in a transverse direction and we were still able to harvest enough fat from the scapular and lumbar regions. The transverse scar was quite acceptable to patients (Figure 1).

Abstract

The latissimus dorsi (LD) myocutaneous flap has long been regarded as the second choice flap for autologous breast reconstruction following a mastectomy in our department. Despite uncertainty about donor-site morbidity, it is regarded as a relatively safe procedure; moreover, in contrast to our first choice, the deep inferior epigastric perforator flap, no microsurgical expertise is needed. LD breast reconstruction with skin graft is a safe choice for autologous breast reconstruction in case of unexperienced hands and where microsurgery facility are not available.

Keywords: Latissimus dorsi (LD); Myocutaneous flap; Mastectomy; Skin graft
by several authors. Chang et al. [4] reported 16% necrosis rates in 75 patients while Delay et al. reported 3% incidence in 100 patients [4]. In this case report patient developed necrosis of the edges of the flaps. It required reoperation with skin graft (Figure 2). It is important that the primary wound closure of the donor site should be relatively tension-free [4]. Inadvertently excessive thinning of back flaps as well as greater tension created in wound closure due to poor skin paddle design have resulted in necrosis and wound breakdown (Figure 3). On the other hand, the LD flap itself is a very reliable flap with very low incidence of partial or complete necrosis. It is noteworthy that a higher incidence of fat necrosis is expected in larger flaps due to the harvest of some fat from beyond the borders of the muscle with its random blood supply [4].

**Figure 2:** Defect after palliative mastectomy.

**Figure 3:** LD Flap with skin graft.

## Conclusion

The LD flap is a good alternative that can be offered for autologous breast reconstruction in a larger breast cancer patient where palliation is required. The flap is primarily indicated for those who are not suitable candidates for TRAM flaps or for that group of patients who would prefer the back donor site and are reluctant to proceed with the prolonged recovery of the pedicled TRAM or for the possible morbidity and the complexity of free tissue transfers. The disadvantages of the flap lie in the high incidence of seroma, mild contour deficiency of the back, limitations in the size of the flap making it unsuitable for certain groups of patients who have very large and/or severely ptotic breasts which is managed in association with split skin graft.

## References

1. Olivari N (1976) The latissimus flap. Br J Plast Surg 29(2): 126-128.
2. Hokin JA (1983) Mastectomy reconstruction without a prosthetic implant. Plast Reconstr Surg 72(6): 810-818.
3. Hokin JA, Silfverskiold KL (1987) Breast reconstruction without an implant: Results and complications using an extended latissimus dorsi flap. Plast Reconstr Surg 79(1): 58-66.
4. Chang DW (2002) Autologous breast reconstruction with the extended latissimus dorsi flap. Plast Reconstr Surg 110(3): 751-759.
