

Case reports

Reconstruction of vulvar lesion with a vertical rectus myocutaneous flap based on inferior epigastric vessels

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Sri Lanka Journal of Obstetrics and Gynaecology 2012; **34**: 159-160

Abstract

This is a case of a 64 year old woman, presented with extensive recurrent vulvar squamous cell carcinoma. She had a unilateral wide local excision of vulva followed by radiotherapy, 30 months prior to this presentation with 18 months of defaulted follow up at outpatient department. During this presentation she had extensive localized disease involving bilateral labial, clitoral and peri-anal regions, which was confirmed by a biopsy. There was no clinical or radiological evidence of lymph node or distant metastasis. As she was medically fit, reconstruction surgery was performed with a vertical rectus myocutaneous flap along with primary closure of clitoral and right labial defects. She had a very good post-operative recovery with minimal morbidity and she was disease free for 40 months after the vulvar reconstruction.



Immediate post reconstruction

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Introduction

The perineum is a difficult area to reconstruct because of its multiple functional and cosmetic roles^{1,2,3}. Major progress in vulvar and vaginal reconstruction was made in late 1970s with skin flaps based on vascular territories, pioneered by McCraw and colleagues^{2,3,4}.

The most recent development in reconstructive surgery of vulva is aimed at achieving a more favourable aesthetic and functional outcome with minimal morbidity^{2,3}. Pedicled skin flaps, including local and regional flaps are commonly used for vulvar reconstruction^{1,3,5,6,7}. These are especially beneficial in previously irradiated areas, which are otherwise prone to breakdown and infection.

Gynaecological oncology is still a developing field in Sri Lanka with recent introduction of subspecialty training. Reconstruction with local gracilis flaps and skin grafts has been the common practise in Sri Lanka until recently. Management for recurrent vulvar carcinoma remains still a challenge for most of Gynaecological Oncologists worldwide.

The following described is a vulvar reconstruction case report performed using vertical rectus myocutaneous flap in at National Cancer Institute, Maharagama, Sri Lanka.

Case report

A 64 year old woman presented with intense itching of her vulva following 18 months of defaulted follow up. She had right sided unilateral wide local excision of vulva with ipsilateral inguino-femoral lymphadenectomy followed by localized irradiation, two and half years prior to this presentation. She had regular follow up at out patient department only for first 12 months after initial treatment.

At this presentation she had extensive recurrent of vulvar tumour involving bilateral labial, clitoral and peri-anal regions which was confirmed by a biopsy. There was no clinical or radiological evidence of lymph node or distant metastasis. Histologically she was confirmed to have recurrent vulvar carcinoma of squamous type. Due to extensive disease in the left labial and peri anal areas vertical rectus myocutaneous flap repair based on inferior epigastric vessels was performed along with primary closure of right labial and clitoral defects.

She had uncomplicated post operative recovery and there is no evidence of tumour recurrence two and half years after the reconstructive surgery.

Discussion

This is the first case report on vulvar recon-

struction using vertical rectus myocutaneous flap performed in Sri Lanka though this method has been practised by other nations for many decades.

Vulvar defects after tumour extirpation have been reconstructed with local flaps. Although these procedures are simple to perform with minimal donor site morbidity, local flaps carry a high incidence of rejection and delayed wound healing^{2, 6, 9,10}. Regional flaps like vertical rectus can provide healthy and reliable soft tissue coverage with minimal wound tension^{2,6,9,10}. Compared to gracilis flap, rectus flap has a very long vascular pedicle supplied by deep inferior epigastric vessels which makes this flap even more favourable¹.

The pedicled anterior abdominal wall flaps can be designed and tailored to reconstruct various vulval defects with favourable outcome especially in recurrent cancer disease where the feasible treatment options are limited.

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