

PRIMARY RECONSTRUCTION OF PERINEAL DEFECT WITH A BILOBED MYOCUTANEOUS FLAP: CASE REPORT

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After radical abdomino-perineal excision for carcinoma of the ano-rectal region a successful primary reconstruction can make all the difference to the physical and functional well being of the patient, quite apart from shortening the period of stay in hospital. The versatility of the myocutaneous flap is now well recognised and in this case report we describe a one-stage repair of a large perineal defect using a bilobed flap which combines the inferior gluteus maximus myocutaneous flap and the tensor fasciae latae myocutaneous flap.

CASE REPORT

A 53-year-old man presented with an advanced mucinous adeno-carcinoma in the perineum, involving the rectum, subcutaneous tissues and skin (Fig. 1).



FIG. 1. Preoperative view to show the ulcerating lesion in the perineum with extensive involvement of the soft tissues.

Under general anaesthesia, an extended abdomino-perineal excision of the rectum was performed including wide excision of the skin, subcutaneous tissues and a part of the gluteus maximus muscle. A permanent colostomy was fashioned on the abdominal wall, but there remained a large perineal defect with peritoneum exposed in the depth of the wound (Fig. 2A).

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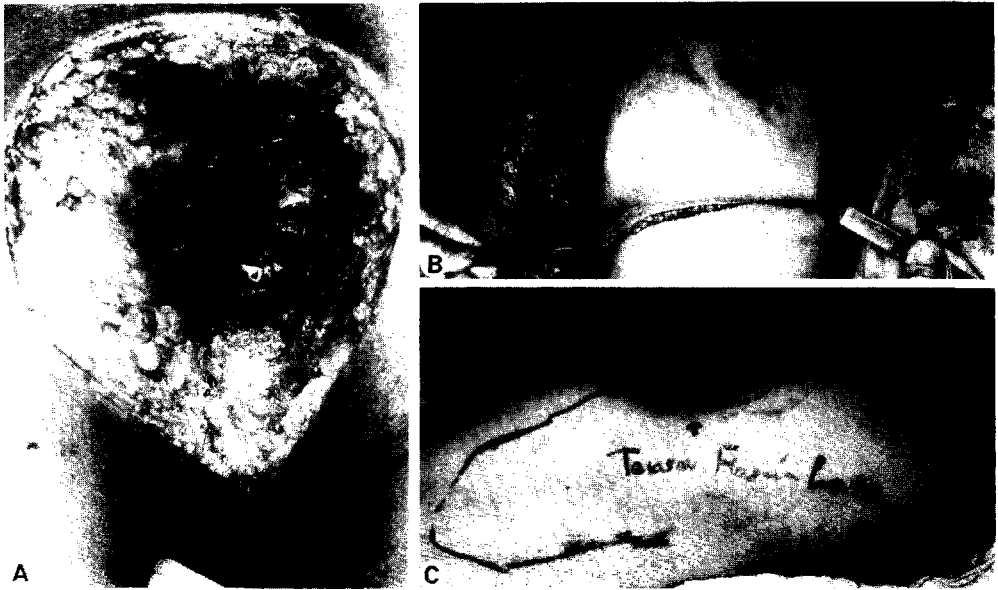


FIG. 2A. Defect after excision with peritoneum displayed in the depth of the wound.

FIG. 2B. Gluteus maximus myocutaneous flap based on the inferior gluteal vessels sufficiently large to close the excisional defect.

FIG. 2C. Tensor fasciae latae myocutaneous flap designed to close the secondary defect.

The patient was turned over to the prone position and a gluteus maximus myocutaneous flap based on the inferior gluteal vessels was raised. The integrity of the inferior gluteal neuro-vascular bundle was confirmed under direct vision and the myocutaneous flap was transposed to close the perineal defect (Fig. 2B).

Primary closure of the flap donor site by direct suture was impossible and to provide adequate protection for the sciatic nerve and the ischial tuberosity a second myocutaneous flap (tensor fasciae latae flap) was raised and transposed to fill the donor defect produced by the first flap (Fig. 2C). The donor area of the tensor fasciae latae flap was closed primarily without any difficulty.

The adequacy of the circulation in both flaps was confirmed by intravenous fluorescein injection.

The patient did well and all the wounds healed without complication (Figs. 3A, B).

DISCUSSION

The gluteus maximus myocutaneous flap is well known and its clinical applications have been described by several authors (Fujino *et al.*, 1975; Maruyama and Tajima, 1978; Maruyama *et al.*, 1980; Maruyama *et al.*, 1980; Minami *et al.*, 1977; Mathes and Nahai, 1979).

The sheer bulk of the flap and the ease with which it can be transposed makes it a very useful flap in the closure of large and deep perineal defects.

However, if the flap is very large in size, there may be difficulty in closing the secondary defect and unless adequate padding is introduced the patient may be left with undesirable complications of pressure (and exposure)



FIG. 3A. Postoperative result to show closure of perineal wound.



FIG. 3B. Lateral view to show the T.F.L. flap lying nicely in position on the secondary defect

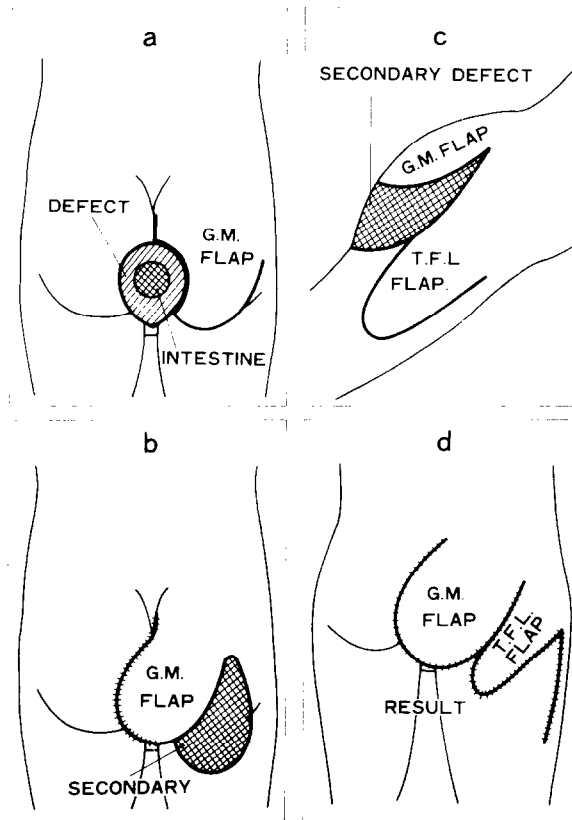


FIG. 4. A. Diagram to show the principle of the repair: Design of a gluteus maximus myocutaneous flap based on the inferior gluteal vessels. B. The flap is transposed and sutured into position. C. A tensor fasciae latae myocutaneous flap is designed to close the secondary defect. D. T.F.L. flap is now transposed and all the wounds are closed by suture without tension.

of the sciatic nerve and ischial tuberosity. The tensor fasciae latae myocutaneous flap is ideally sited and suited for closure of this potentially troublesome secondary defect. It is a safe flap with an excellent "track record" (Nahai *et al.*, 1978; Nahai *et al.*, 1979; Mathes and Nahai, 1979; Hill *et al.*, 1978).

The combination of these two flaps is comparable to the "bilobed flaps" used in plastic surgery for closure of smaller defects in other parts of the body (Morgan and Samiiian, 1973; Tardy *et al.*, 1972; Zimany, 1953) and the "trilobed flap" described by Harashina *et al.* (1977).

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