

mentioned and can occasionally progress to lymphoma. All patients with the plasma cell variant need full investigation, including CT of the chest.

In summary, although the majority of cervical Castleman's disease occurs laterally, this case demonstrates that Castleman's disease should be considered in the differential diagnosis of a solitary midline neck mass. The treatment for localised Castleman's disease is excision, which is regarded as curative.

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Pregnancy as an autologous tissue expander for closure of an abdominal-wall defect

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SUMMARY. We report the reconstruction of a complex abdominal-wall defect using expanded skin from pregnancy. Wound closure was achieved using a vertical abdominoplasty. © 2003 The British Association of Plastic Surgeons. Published by Elsevier Science Ltd. All rights reserved.

Keywords: tissue expansion, pregnancy, abdominal wall.

The use of tissue expansion for the reconstruction of defects in the abdominal wall is well described.^{1–3} We report an unusual case of abdominal-wall reconstruction making use of pregnancy as an autologous tissue expander.

Case report

A 33-year-old woman was admitted with an abdominal-wall

desmoid tumour measuring 15 cm × 8 cm. After tumour resection, the abdominal-wall defect was closed using a free latissimus dorsi myocutaneous flap over a mesh repair. The flap did not survive and was removed 24 h postoperatively. Twelve days later there was sufficient granulation tissue over the mesh to apply a skin graft and thereby close the wound. She was discharged for outpatient management with an abdominal support.

Seven months after this surgery, she presented to the clinic 2 months pregnant. There was a small discharging wound overlying the distal end of the mesh. It was decided

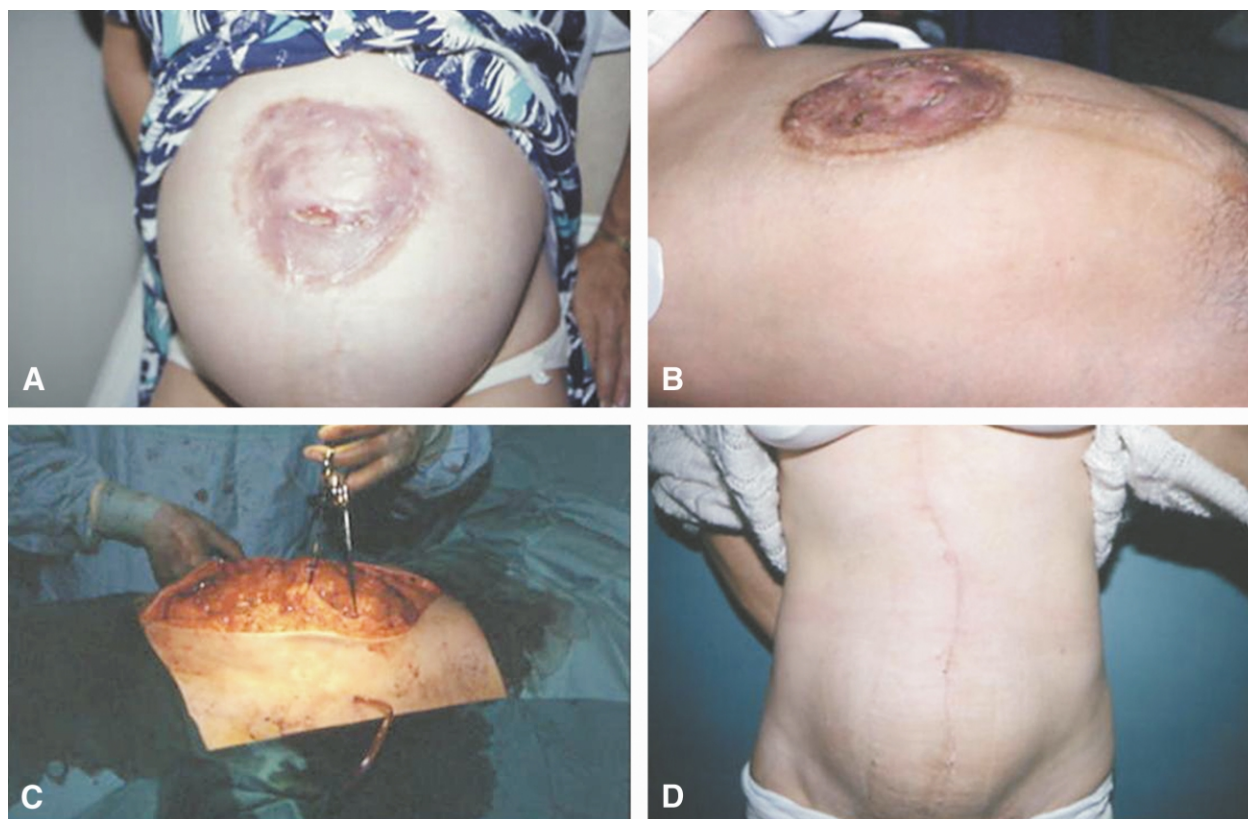


Figure 1—(A) Central abdominal-wall defect, closed using a skin graft and mesh, at full-term. (B) Preoperative photograph after a normal delivery. (C) Intraoperative photograph showing mobilisation of the lateral abdominal wall to close the defect. (D) Postoperative anterior view showing a completely healed wound and a satisfactory scar.

to effect definitive wound closure after delivery using the laxity of the expanded abdominal wall.

Two days after a normal full-term vaginal delivery there was sufficient laxity in the abdominal wall to allow surgical closure using a vertical abdominoplasty (Fig. 1(A) and (B)). The skin graft and mesh were excised in an ellipse, and the expanded full-thickness abdominal walls were elevated and advanced medially as laterally based flaps (Fig. 1(C)). Her postoperative course was uneventful, and the wound healed without complication. She was discharged after 10 days. Examination at 3 months revealed a stable scar with no evidence of abdominal-wall hernia (Fig. 1(D)). The cosmetic appearance was satisfactory to the patient.

Discussion

Defects of the abdominal wall greater than 15 cm in size can ideally be closed by tissue expansion after temporary control using a skin graft.⁴ The potential for significant tissue gain by using expanders in growing infants was exploited by Zuker et al in 1986 when they described the insertion of intra-abdominal tissue expanders for the reconstruction of major abdominal-wall defects arising from the separation of ischiopagus conjoined twins.⁵

Pregnancy has all the characteristics of an ideal tissue expander—it is autologous, there is a good blood supply, expansion is gradual and there is no risk of infection or implant extrusion. In this case the symmetrical distri-

bution of the full-thickness tissue expansion aided the closure of a midline abdominal defect. The use of pregnancy as an autologous tissue expander has been reported once before, when a massive ventral hernia was closed after a normal pregnancy.⁶ Similarly, in our case the pregnancy provided an ideal solution to a complex reconstructive problem.

This case is a reminder to reconstructive surgeons of the potential advantages of using tissue expansion in abdominal reconstruction.

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