# An interesting rash following bowel and abdominal wall transplantation

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### DESCRIPTION

A 41-year-old man developed an ischaemic bowel from a paroxysmal embolic event via patent foramen ovale (PFO). As a result he had emergency laparotomy and had a near total enterectomy (leaving just 18 cm colon remaining) with duodenostomy and loss of abdominal domain. His PFO was closed and he was established on total parental nutrition for irreversible intestinal failure.

He underwent a successful isolated bowel and abdominal wall composite allograft transplant from a donor (human leucocyte antigen match: 2–2-1), one year after the ischaemic event. Postoperatively, his immunosuppression was maintained with tacrolimus therapy. Several weeks following his transplant he attended the outpatient clinic with a 4-day history of a non-pruritic rash (shown in the image) over his transplanted abdominal graft (figure 1).

The faint non-pruritic erythematous papular follicular eruption spread over the entire abdominal graft. The rest of the patient's skin was normal. A 1 mm punch biopsy was obtained which showed perifollicular chronic inflammatory cell infiltrate and overlying spongiosis suggesting Banff grade II acute rejection. However, there were no signs of rejection on endoscopic examination of the transplanted bowel, which had healthy pink mucosa throughout. He received three doses of methylprednisolone and the rash subsequently resolved with this treatment.<sup>1</sup>

This case illustrates the subtle presentation of rejection and the fine balance between suppression of immune rejection and avoidance of the

complications of immunosuppression.<sup>2</sup> Abdominal wall transplantation not only alleviates the difficulties in closing the abdomen in these patients but may also provide a readily visible canvas to detect and manage rejection early.<sup>3</sup>

## **Learning points**

- Bowel transplantation helps avoid the serious long-term complications of total parental nutrition and may improve quality of life.
- ▶ Patients who have undergone numerous previous laparotomies and surgical procedures often have contracted and scarred abdominal walls, which may fail to close following intestinal transplantation. These patients are candidates for abdominal wall transplantation.
- ➤ Any erythematous papular follicular eruption on a transplanted skin or abdominal wall graft should be considered rejection until proven otherwise.

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Competing interests None.

Patient consent Obtained.

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**Figure 1** Left: photograph of the abdominal wall graft, and right: photograph of the rash noted on the skin of the abdominal wall graft.

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## Images in...

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