

Surgical Reconstruction of Peri-fistula/stomal Soft Tissue: Revise, Isolate, Skin Graft, Pouch (RISP)

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Introduction

A leaking ostomy or fistula pouch is devastating to the patient and provider. In some situations, the soft tissue around the fistula or ostomy makes it impossible to apply a pouch and contain effluent. "Unpouchable" peri-stomal/fistula conditions include open wounds, scarring or uneven skin, fistula under wound edge, and poorly sited or retracted stomas. Unpouchable patients can be facility bound for extensive stays.

Purpose

RISP (Revise, Isolate, Skin graft, Pouch) is a surgical technique to reconstruct peri-stomal and peri-fistula soft tissue. The purpose of RISP is to transition the patient to a standard, easy-to-apply ostomy appliance. RISP patients can then become independent in caring for their ostomy or fistula.

Methods

We present patient cases to illustrate the **RISP** technique:

- **Revise** soft tissue surgically to fully expose the stoma or fistula and create a pouching site around the fistula or ostomy stoma. Note: We do not enter the peritoneum.
- **Isolate** and control ostomy or fistula output and apply negative pressure wound therapy (NPWT) to prepare the pouching site.
- **Skin graft** the tissue around the ostomy or fistula. Protect the graft with an isolation device and a contact layer and bolster with NPWT.
- **Pouch** with a standard ostomy appliance and instruct patient in self-care after the skin graft has taken.

Results

The RISP technique effectively creates ostomy appliance pouching sites for patients with unmanageable ostomies or fistulas. Isolation devices* coupled with NPWT enable control of effluent after soft tissue revision and skin graft placement around the ostomy or fistula. Ultimately peri-ostomy/fistula skin grafts healed and all patients transitioned to a reliable, easy-to-place ostomy pouch.

Conclusion

RISP highlights the need for a multidiscipline approach to reconstruct an improved pouching site around ostomies and fistulas. RISP can improve patient quality of life, decrease hospital stays and enable patients to return to home.

RISP incision formula development

