Effective management of incisional and cutaneous fistulae with closed suction wound drainage.

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Management of incisional and cutaneous fistulae is a multifaceted problem and is particularly challenging in the wound management of patients with ventral incisions complicated by entero-cutaneous fistula due to containment of effluent, wound configuration and abdominal contour. The paper describes the development of a closed suction wound drainage system that is effective in; 1) collecting drainage from the most difficult sites, 2) obviating skin damage, 3) improving wound granulation and contraction, 4) minimizing dressing and nursing requirements and, 5) reducing the cost associated with wound management and containment. The application technique using a Jackson-Pratt hemovac drain, gauze-filler dressing, transparent adhesive film, and ancillary materials to seal the wound site, is described with illustrations. The system was connected to wall suction at 60-80mmHg on continuous suction and was changed every three to five days. Seven patients (mean age 57 years) with eight fistulae were managed with the system and all wounds closed in a mean time of 16 days (range 8-23 days). All patients were classified as small-output fistulae with a peak mean daily output of 440ml. The results from this initial evaluation demonstrated that closed suction wound drainage was effective in managing enterocutaneous fistulae complicating ventral abdominal wounds by minimizing morbidity, reducing nursing requirements and costs, limiting the degree of fibroplasia which improved wound contracture and re-epithelialization.