The use of fibrin glue in surgical treatment of pilonidal sinus disease: A prospective study in the limberg flap procedure.

Authors: Sozen S., Topuz O., Keceli M., Tukenmez M., Onceken O., Tuna O.

Publication Date: 2011

Abstract:

Objective: Different surgical techniques for pilonidal disease have been described in the literature. Limberg flap has low morbidity and recurrence rates. Fibrin sealant, a two-component tissue adhesive composed of fibrinogen and thrombin, has been used in a number of surgical procedures to achieve hemostasis and to seal tissues. The purpose of this study was to investigate the effect of fibrin sealant on the Limberg flap procedure. Methodology: 132 male patients with pilonidal sinus who underwent Limberg flap operation were evaluated prospectively. The patients were assigned randomly into two groups (group 1; with suction drain, group 2; fibrin glue). Results: Seroma was encountered in 5 of 132 patients (3.78%); Flap oedema occurred 4(6.06%) patients in group 1. Wound infection occurred in one patient (1.5%) in group 1. Most patients in group 2 were mobilized on the first postoperative day, and the median time to first mobilization was earlier in group 2 than in group 1 (1 (1-1) versus 2 (1-2) days respectively; P<0.001). The median duration of incapacity for work was 17 (15-20) days in group 1 and 8 (6-12) days in group 2 (P < 0.001).Total wound dehiscence and flap necrosis did not occur in any patient. There has been no recurrence in any of the patients during the follow-up period. The mean time for complete healing of wound after rhomboid excision and Limberg flap plus fibrin sealant was 8.13+/-7.88 days (range 6-28 days). This was markedly increased in group 1 patients (mean 22.08+/-8.59 days, and range 15-60)(p < 0.001). Conclusion: We recommend the use of fibrin sealant with Limberg flap technique. Our results suggest that drains may be avoided with fibrin sealant.