Autologous fibrin tissue adhesive in endoscopic sinus surgery.

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Publication Date: 1995

Abstract:

Endoscopic sinus surgery may be complicated by bleeding, formation of synechia, and infection.

This study investigated the application of autologous fibrin tissue adhesive during endoscopic sinus

surgery in on attempt to avoid packing, to decrease complications, and to improve healing. Fibrin

tissue adhesive from pooled human blood is a hemostatic and bacteriostatic agent. Autologous fibrin

tissue adhesive avoids the potential infectious and immunologic risks of the peeled bleed product.

Twelve patients undergoing bilateral endoscopic sinus surgery participated in the study. Phlebotomy

and preparation of the adhesive were performed during the procedure. Fibrin tissue adhesive was

applied to only one side, with the contralateral side used as a control. Bacitracin ointment was

applied to the adhesive-treated side, and packing coated with bacitracin was placed on the

contralateral side. Patients were observed for a minimum of 3 months, and results were documented

with photographic and video recordings. A uniformly high degree of patient satisfaction was

achieved because of the elimination of packing and a sensation of increased nasal airway potency

on the fibrin- treated side. Fibrin tissue adhesive provided hemostasis, decreased crusting,

accelerated mucosal healing, and diminished synechia. Autologous fibrin tissue adhesive is

beneficial in endoscopic sinus surgery, and its application should be considered, especially when

the risk of hemorrhage or synechia is increased.