

The use of fibrin sealant in urology. [Review] [87 refs]

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Abstract:

PURPOSE: Fibrin sealant has been increasingly applied in various surgical fields, including urological surgery, in the last 2 decades. We determined the safety and efficacy of fibrin sealant in urological surgery and identified areas that need further clinical investigation.

MATERIALS AND METHODS: A MEDLINE search of all available literature regarding the use of fibrin sealant was performed. All articles, including experimental animal studies, prospective and retrospective studies, case series and case reports of fibrin sealant for hemostasis and/or other urological applications, were identified and reviewed.

RESULTS: Prospective randomized studies in the field of thoracic and trauma surgery show the efficacy and safety of fibrin sealant for hemostasis. Based on these data fibrin sealant has been used successfully for hemostasis during partial nephrectomy and traumatic renal reconstruction. A number of experimental animal studies, case series and case reports show the efficacy of fibrin sealant for ureteral anastomosis, microsurgical vasal anastomosis, fistula repair, circumcision and orchiopexy as well as its use as an adjunct in other areas of reconstruction.

CONCLUSIONS: Fibrin sealant is an effective and safe topical agent for controlling surface bleeding during elective and trauma related urological procedures. Using fibrin sealant as an adhesive for reconstruction requires further prospective studies. The introduction of laparoscopic procedures in urology may expand the indications for fibrin sealant as an alternative method of tissue

reapproximation. Limiting the routine use of fibrin sealant to procedures with demonstrable benefits is desirable and would lead to a cost saving approach. [References: 87]