

Haemostatic sealants in nephron-sparing surgery: what surgeons need to know. [Review] [47 refs]

Authors: Dalpiaz O, Neururer R, Bartsch G, Peschel R

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Abstract:

Surgical haemostatic agents have been increasingly applied for the control of bleeding, and have excellent potential in laparoscopy. Several factors are important when evaluating the use of sealants. We present a brief overview of the history, composition and mechanism of action of sealants, together with a report on experimental studies and clinical experience with haemostatic sealants. We searched for reports on haemostatic agents and their use in renal parenchymal haemostasis; 15 animal models studies and 11 papers on clinical experience were included. The development of haemostatic agents and instruments is allowing the wider diffusion of challenging procedures. Several experimental animal studies have shown the efficacy and safety of sealants for haemostasis during nephron-sparing surgery. Clinical studies confirm the effectiveness of synthetic or fibrin glue, in particular during laparoscopic surgery. Sealants are effective and safe topical agents to control bleeding during nephron-sparing surgery. They should not be viewed as an alternative, but as complementary agents to be used to improve surgical outcomes. Further prospective studies are necessary to validate their role in relation to other haemostatic support techniques. [References: 47]