Use of fibrin glue as a sealant at the anastomotic line in laparoscopic

pyeloplasty: A randomised controlled trial.

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Abstract:

Objective To assess the effectiveness of fibrin glue as a sealant at the anastomotic line of a

stentless laparoscopic pyeloplasty (LPP) repair instead of JJ stent insertion. Patients and methods

In all, 46 patients with pelvi-ureteric junction obstruction scheduled for LPP were randomised into

two groups each containing 23 patients. Group A underwent stented repair, while group B had a

stentless repair together with sealing of the anastomotic line with fibrin glue. Results There was no

statistically significant difference between the groups for the postoperative improvement in the renal

scan and intravenous urography. However, there was a statistically significant decrease in early

postoperative adverse events in group B. In group A, all the patients had irritative lower urinary tract

symptoms (LUTS) and 16 (72.7%) had postoperative urinary tract infections (UTIs). In group B, no

patient had a UTI or irritative LUTS. In all, 21 patients (95.4%) in group A had minimal terminal

painful haematuria; while in group B, only one patient (4.3%) had minimal total painless haematuria.

Also, patients in group B were spared the need for a second anaesthesia exposure for stent

removal. Conclusion The use of fibrin glue is a valid alternative to stenting in LPP with the same

excellent outcome but with markedly lower short-term postoperative adverse events.

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