Use of fibrin glue (Tissucol) as a hemostatic in laparoscopic

conservative treatment of spleen trauma. [Erratum appears in Surg

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Abstract:

BACKGROUND: This study aimed to evaluate the effect of fibrin glue in laparoscopic

spleen-preserving procedures for traumatic rupture.

METHODS: From January 2002 to December 2005, six laparoscopic spleen-preserving procedures

were performed for traumatic rupture using fibrin glue. Two of the cases had previous middle and

lower abdominal surgery. Survey of the abdominal cavity was performed by inserting two 5- to

12-mm trocars, one 5-mm trocar, and a 30 degree scope. A complete survey of all the patients was

performed.

RESULTS: None of the patients required laparotomy, and no postoperative bleeding occurred. The

fibrin sealant achieved immediate hemostasis, and all the patients recovered without further splenic

bleeding. The mean postoperative stay was 4.3 days (range, 4-5 days). All the patients were

followed up for 3 to 12 months. Postoperative immunoglobulin scanning, ultrasonography, and

computed tomography (CT) results were normal.

CONCLUSIONS: Laparoscopic management of spleen trauma can be used once a positive

diagnosis has been made. It is useful for assessing the degree of splenic injury. A laparoscopic

spleen-preserving procedure can be used safely for patients with stable vital data. It is an effective

procedure for the evaluation and treatment of hemodynamically stable patients with splenic injuries for whom nonoperative treatment is controversial. The topical application of a fibrin sealant in splenic trauma achieves definitive hemostasis safely, rapidly, and reliably. It also is simple to use in either laparoscopic or open procedures.