

The Role of Laparoscopy in Abdominal Trauma: A 10-Year Review

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Abstract

Laparoscopy is accepted in penetrating abdominal trauma (PAT), but its role in blunt trauma (BAT) remains a controversial one. Our study assessed the utility of diagnostic laparoscopy (DL) and therapeutic laparoscopy (TL) in abdominal trauma between December 2006 and January 2016. We analysed the indication for laparoscopy, type of lesions, TL, conversion rate, complications and length of hospital stay. 49 patients had a DL: 42 males and 7 females, with a mean age of 36.1±13.3. We had 20 PAT and 30BAT. The indications for laparoscopy were: diagnosis of penetration in PAT, suspicion of hollow organ injury or diaphragm injury, active bleeding in organ injuries in BAT. 11/48 of pre-operative ultrasounds and 4/48 of CT's were false negative. In 3 of 20 PAT, DL was negative and in 4 nontherapeutic. There were 4 TL's and 7 conversions. The main injuries in BAT were: 9 hollow organ perforations, 6 mesenteric lacerations, 2 diaphragmatic and 2 splenic injuries. There were 10 TL's, 9 conversions and 14 TL. The operative time and length of hospital stay was higher in the conversion group. There were 6 complications and 3 mortalities. There were no missed injuries. An unnecessary laparotomy was avoided in 18/49 cases (36.73%). In selected cases of PAT and BAT with equivocal clinical and imaging diagnosis, laparoscopy is a useful tool with therapeutic role, that reduces unnecessary laparotomies, complication rate and hospital stay.

Key words: Penetrating abdominal trauma, blunt abdominal trauma, laparoscopy