

Gastrointestinal Injuries in Blunt Abdominal Traumas

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Abstract

Aim: To discuss the efficiency of RTS (Revised Trauma Score), ISS (Injury Severity Score), and factors that affect mortality and morbidity in gastrointestinal injuries due to blunt trauma.

Method and methods: Patients with gastrointestinal injuries due to blunt trauma operated within the last six years have been studied retrospectively in terms of demographics, injury mechanism and localization, additional injuries, RTS and ISS, operative technique, morbidity, mortality and duration of hospitalization.

Findings: Of the eighteen cases, cause of injury was a traffic accident for 11 (61.1%), fall from height for 5 (27%) and physical attack for 2 (11%). Among the eighteen patients, there were 21 gastrointestinal injuries (11 intestinal, 6 colon, 3 duodenum, 1 stomach). 10 (55.6%) had additional intra-abdominal injuries while the number for extra-abdominal injuries were 12 (66.7%). Primary suture (10), segmentary resection (9) and pyloric exclusion (2) were the operations performed for the twenty-one gastrointestinal injuries. Although statistically not significant, 13(72.2%) patients with additional injuries compared with 5 (27.8%) patients with isolated gastrointestinal injuries, were found to have lower RTS (7.087/7.841), higher ISS (19.4/12.2), longer duration of hospitalization (11.5/8.4 day) as well as higher morbidity (7/1) and mortality (2/0) rates. Comparing the RTS (7.059/7.490) of patients who have and have not developed morbidity revealed no significant difference. However, ISS (23.9/12.2) was significantly higher in patients who have developed morbidity ($p=0.003$). RTS (6.085/ 7.445) and ISS (39.5/14.6) of patients who have survived were significantly different than patients who have not ($p=0.037$ and $p=0.023$, respectively)

Conclusion: Additional injuries in patients with gastro-intestinal injury due blunt abdominal traumas increases, although not significantly, morbidity, mortality and duration of hospitalization even when operated early. High ISS is significantly related to the risk of both morbidity and mortality while low RTS is significantly related only to the mortality risk.

Key words: gastrointestinal injuries, blunt abdominal trauma, Revised Trauma Score, Injury Severity Score

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