

Nonoperative Treatment of Abdominal Trauma Involving Liver and Spleen

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Abstract

Introduction: The management of this type of trauma has evolved considerably, especially with the introduction of interventional radiology (angiography, splenic artery embolization - SAE) but also the concept of non-operative treatment (NOT), defined as a follow-up of injuries, without surgery.

Material and method: We have established a strategy for dealing with cases of abdominal trauma with injuries by non-operative treatment (NOT). We applied NOT to 13 patients in 50 (26%), of which 8 were patients with spleen injuries and 5 were patients with liver damage. Most of the lesions were grade II (8 cases), 2 cases were grade I and 3 cases were grade III.

Results: There was only one case dealt by NOT, in which surgery was performed 48 hours after admission. In two patients with extravasation of the contrast agent on CT and angiography, angioembolization of the splenic artery was performed, with good results. Control CT was performed at a period that varied between 24 hours and 5 days after admission. The average period of hospitalization of patients approached by NOT was 6,6 days.

Conclusions: Contrast-enhanced CT examination remains the basis for NOT initiation, providing the necessary data on the degree of liver or splenic lesion, the size of blood collections and extravasation of the contrast substance but is also the essential imaging exploration in assessing NOT efficacy. Angioembolization can be successfully performed in cases where CT examination and angiography show contrast extravasation. There was only one case included in the NOT, which was operated laparoscopically, but most authors emphasize that this should not be considered a failure of the method.

Key words: non-operative treatment, abdominal trauma, interventional radiology