
Non-operative management of blunt hepatic trauma :

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The liver and spleen are the most commonly injured abdominal organs after penetrating and blunt trauma. Over the last 10 years, there has been a dramatic change in the management of hepatic injury, specifically its non-operative management. It has been shown that bleeding from injured liver can cease spontaneously, hence strategies that advocate selective non-operative management has evolved. Such a policy is possible because of improvements in resuscitation, intensive care and monitoring of trauma patients, coupled with advances in diagnostic radiology. This study was designed to examine the safety of nonsurgical management of hemodynamically stable patient with blunt hepatic trauma detected by ultrasonography and/or CT scanning of the abdomen. During the 27 months study period, 40 patients with blunt hepatic trauma were admitted to Accident & Emergency Departments in Bertha University Hospitals, and El-Sahel Teaching Hospital during the period from October 1999 to December 2001. Five patients out of the forty patients did not accomplish the criteria for nonoperative management and thereby required emergency laparotomy after resuscitation but without CT examination. Thirty-three patients (82%) were treated successfully by nonoperative means including two patients with CT grade I hepatic injuries, eleven patients with grade II injuries, twelve patients with grade III injuries, and eight out of ten patients with grade IV injuries. Of the total forty patients in our study, seven patients (17.5%) required operative intervention; because of hemodynamic instability in two cases, peritoneal signs in one case, splenic rupture in one case, and massive hemoperitoneum in the fifth case. The other two cases required delayed intervention because they failed conservative treatment. One of them developed delayed hemorrhage and the other one had subphrenic biloma collection. In conclusion, minimal intervention is the policy of treating adult blunt hepatic injuries. Non-operative management protocol for blunt hepatic injuries should be carefully designed to avoid increasing transfusion requirement and delaying surgery when necessary. C.T. scanning is a promising tool for early prediction of the necessity for surgical intervention. When surgery is indicated, conservative surgical approaches are associated with a significantly lower liver related mortality. Surgeons should be familiar with every surgical procedure for hepatobiliary surgery, and every surgical procedure performed should be aimed at hemorrhage control instead of tissue resection.