RECENT TRENDS IN THE MANAGEMENT OF SPLENIC AND LIVER TRAUMA

Essay

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General Surgery

By

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List of Abbreviation

AAST	American association for surgery of trauma		
ACS	American college of surgeons		
AE	Angioembolization		
AIS	Abbreviated injury scale		
ATLS	Advanced trauma life support		
BAT	Blunt abdominal trauma		
CEUS	Contrast enhanced ultrasound		
DPL	Diagnostic peritoneal lavage		
FAST	Focused abdominal sonography for trauma		
GCS	Glasgow Coma Scale		
LMWH	Low molecular weight heparin		
LP	Laparoscopic		
MDCT	CT Multidetector CT		
MSA	MSA Superior mesenteric artery		
NOMSI	Non operative management of splenic injuries		
NOMLI	NOMLI Non operative management of liver injury		
OR	Operating room		
OPSI	Overwhelming post splenectomy infection		
PS	Primary survey		
RR	Respiratory rate		
RTS	Revised trauma score		
SBP	Systolic blood pressure		
SNOM	Stab non operative management		
SS	Secondary survey		
TS	Trauma score		

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الاتجاهات الحديثة في تشخيص وعلاج اصابات الكبد والطحال

مقالة

مقدمة كجزء من متطلبات درجة الماجستير في الجراحة

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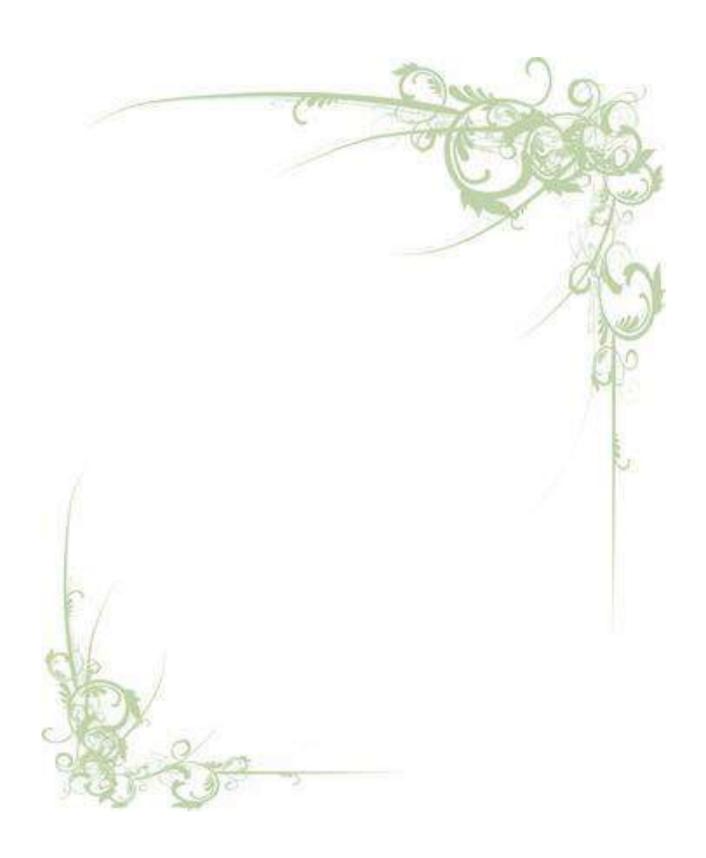
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Introduction

The solid organs of the abdomen are generally considered to be the liver, the spleen, and the two kidneys. These organs are injured most frequently by strong blows to the abdomen, back, or flank regions such as may occur in automobile accidents, crashes, and contact sports. Because these organs are solid, they tend to tear or crack when struck with significant force. These tears have a tendency to bleed due to the large amount of blood flow these organs receive. In some cases, the bleeding is life threatening. (Farnell et al., Y···)

The spleen is the most common solid organ injured after blunt abdominal trauma. Splenic injuries may occur in isolation or in association with other solid organ or hollow viscous injuries. The liver is the second most commonly injured organ in abdominal trauma, but damage to the liver is the most common cause of death after abdominal injury. The most common cause of liver injury is blunt abdominal trauma, which is secondary to motor vehicle accidents in most instances (Acker et al., Y., £)

There is conflicting evidence concerning the prevalence of liver involvement in patients with trauma. The prevalence of liver injury in patients with blunt multiple traumas vary from ' to '.' (Matthes et al., '..,'). One of the largest studies

that addressed hepatic trauma reported a prevalence of £, ? about a trauma population of ?, ? patients (Clancy et al., ? · · ·). In the database of the North Carolina Department of Health and Human service, this prevalence is higher, reaching \land whereas in the German polytrauma registry, it reached ?, ? (Bardenheuer et al., ? · · ·).

Several classification systems have been proposed in an attempt to incorporate the aetiology, anatomy and extent of injury and correlate it with subsequent clinical management and outcome. The widely accepted Organ Injury Scale is based on anatomical criteria that quantify the disruption of the liver parenchyma and defines six groups which may influence management strategies and relate to outcome such as Rationale and principles of liver trauma classification, Reported schemes for the classification of liver trauma, Classification based on the extent of injury and intraoperative findings, Vascular injury classification, Organ Injury Scale (the Organ Injury Scaling Committee of the American Association for the Surgery of Trauma – AAST) classification and Radiological classification (**Poletti et al.**, **Y...**).

With the shift toward nonoperative management, most hepatic injuries are managed nonoperatively. On the other hand, up to two-thirds of high-grade hepatic injuries require laparotomy; these cases are technically difficult and

Introduction

challenging. Damage-control approaches, understanding of liver anatomy, and advances in technology have dramatically changed the approach to hepatic trauma, with improved outcomes. Anatomic or nonanatomic liver resection is required in % to % of liver injuries. Mortality with liver injury following resection is % with current advances (**Piper and Peitzman**, %, %).

Aim of the work

This work aiming to give us a framework about liver and spleen trauma and how we could decrease number of mortalities and morbidities following spleen & liver trauma and to review recent concepts in management of trauma.