update mangement of blunt abdominal trauma

Essay

Submitted for partial fulfillment of

M.Sc Degree in General Surgery

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Acknowledgment

First and foremost, thanks to GOD .

I would like to express my sincere and deep gratitude to my **Prof. Dr. Khalid Abdalla EL Fiky** *(Professor of general surgery, faculty of medicine, Ain Shams University)* for his kind help, co-operation and valuable suggestions. It is a great honor to work under his guidance and supervision.

Also, I am very grateful to **Dr. Gamal Fawzy Samaan** *(lecturer of general surgery, faculty of medicine, Ain-Shams University)* for his valuable help, constructive criticism and keen interest in the progress and accomplishment of this work.

At last I am very thankful to my family for their great help and support, without them I couldn't accomplished this work especially my husband, my son, my parents and my sister.

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List of abbreviations

ABCDE	**Airway, Breathing, Circulation, Disability, Exposure**
AAST	**American association for the surgery trauma**
ACS	**American collages of surgeons**
ACTH	**Adrenocorticotropic Hormone**
AP	**Antroposterior**
BP	**Blood pressure**
C/S	**Cervical spine**
CO_2	**Carbon dioxide**
CT	**Computed tomography**
DPL	**Diagnostic peritoneal lavage**
ED	**emergency department**
FAST	**Focused abdominal sonography for trauma**
FUSG	**Focused abdominal sonogram for trauma**

g/day	**grams per day**
GCS	**Glascow coma scale**
IV	**Intravenous**
IVU	**intravenous urogram**
kcal/g	**kilocalories per gram**
LP	**Laparoscopy**
MRI	**Magnetic resonance imaging**
MVCs	**Motor vehicle crashesm**
OPSI	**overwhelming postsplenectomy infection**
OPSS	**overwhelming post-splenectomy sepsis syndrome**
OR	**operating room**
RR	**respiratory rate**
RTAs	**Road traffic accidents**
RTS	**Revised Trauma Score**
SBP	**Systolic blood pressure**
SS	**Secondary survey**
TCA	**Tricarboxylic cycle**
TS	**Trauma Score**

US **Ultrasonography**

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UPDATE MANAGEMENT OF BLUNT ABDOMINAL TRAUMA

Introduction

Motor vehicle crash represent ٧٥٪ of causes of blunt abdominal trauma, the other causes include fall from height, crashes, sport injuries and assault **(Handily and Giannaodis, ٢٠٠٨).**

Causes of intra abdominal injuries in blunt abdominal trauma are: compression which is produced by crush injury ,abrupt shearing forces which cause tear in intra abdominal organs or their vascular pedicles ,or sudden rise in intra abdominal pressure causing rupture in an intra abdominal viscous **(Pietzman,et al., ٢٠٠٨).**

The diagnosis of hollow viscus injury remains a challenge in abdominal trauma patients **(Fakhry, Watts , and Luchette , ٢٠٠٣).**

In solid abdominal organ injury the hemodynamically stable patients are treated medically under close observation for ٢٤-٤٨h, or by angioembolization or by packing and rarely by open surgical repair.

While in patients who are hemodynamically unstable surgery is the immediate and first choice (**Kobayashi , Green and Rhee , ٢٠١٠).**

Indications for laparotomy in a patient with blunt abdominal injury include signs of peritonitis, uncontrolled shock or hemorrhage, clinical deterioration during observation, and hemoperitoneum findings after focused assessment with sonography for trauma (FAST)or diagnostic peritoneal lavage(DPL) examinations **(Udeane ,٢٠١١).**

The abdomen is a diagnostic black box. Fortunately, with few exceptions it is not necessary to determine which intra abdominal organs are injured, only whether an exploratory laparotomy is necessary or not. Physical examination of the abdomen is unreliable in making this determination for the majority of patients suffering blunt abdominal trau-

ma, it is not clear whether exploration is needed **(Burch , Françoise , and Moore , ٢٠٠٥).**

Adequate volume therapy appear to be the cornerstone in managing the polytrumatized patient with blunt abdominal injury after of course ensure adequate airway and ventilation in order to decrease mortality (**Krausz M , ٢٠١٠).**

Incidence and prevalence of blunt abdominal trauma

Incidence and prevalence of blunt abdominal trauma

Injury is the leading cause of death and disability in the first four decades of life and is the third most common cause of death over all.

- In ١٩٩٠ approximately ٥ million people died worldwide as result of injury.
- Approximately ٢ male deaths due to trauma were reported for every female death.
- Injured accounted for approximately ١٢,٥٪ of all male deaths, compared with ٧,٤٪ of female death.
- The risk of dying from trauma is highest in the age group of ١٥-٦٠ years.
- Estimates indicate that by ٢٠٢٠, ٨,٤ million people will die yearly from injury, injuries from RTA will be the third most common cause of disability worldwide and the second most common cause in developing world.
- Under reporting of deaths and injury is widespread especially in undeveloped countries.

Despite the acute onset of trauma, the chronic consequence has debilitating effects in the longer terms **(Rayan,Trunkey and Moore, ٢٠٠٠).**