

REGIONAL INJURIES II

ABDOMINAL INJURIES

Mechanical trauma to the abdomen will result in injuries to the abdominal wall and abdominal viscera which includes pelvic viscera

Types of injuries could be due to

- **Both blunt and penetrating injuries**
- **Compression injuries are also common**
- **Damage to the organs like spleen, liver, kidneys and mesentery**

ABDOMINAL INJURIES

- Damage to the stomach and bowel can cause death from peritonitis
- Stab wounds are also common in the abdomen and may involve stomach, liver or intestine and result in death from haemorrhage or peritonitis

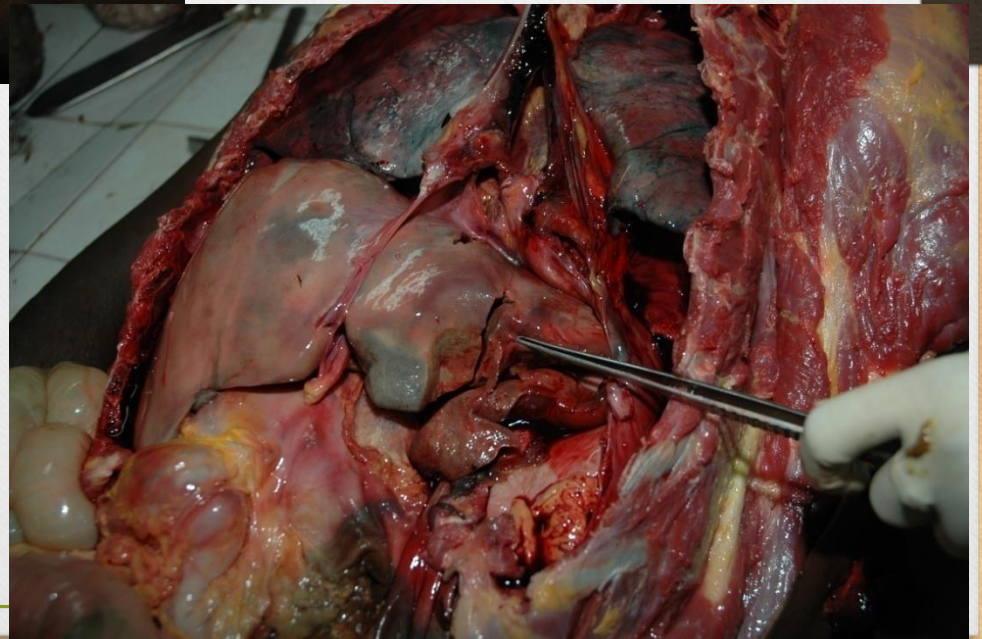
Abdominal wall

Injuries will include

- Skin
- Subcutaneous tissues
- Muscles
- Lumbosacral spine
- Pelvis



Incised wounds to abdomen



Abdominal viscera

- Hollow viscera- stomach, small and large intestine, urinary bladder
- Solid viscera – Liver, spleen, kidneys, pancreas etc
- Full bladder or full stomach may also act as solid viscera

Injuries to the stomach duodenum, small and large intestine

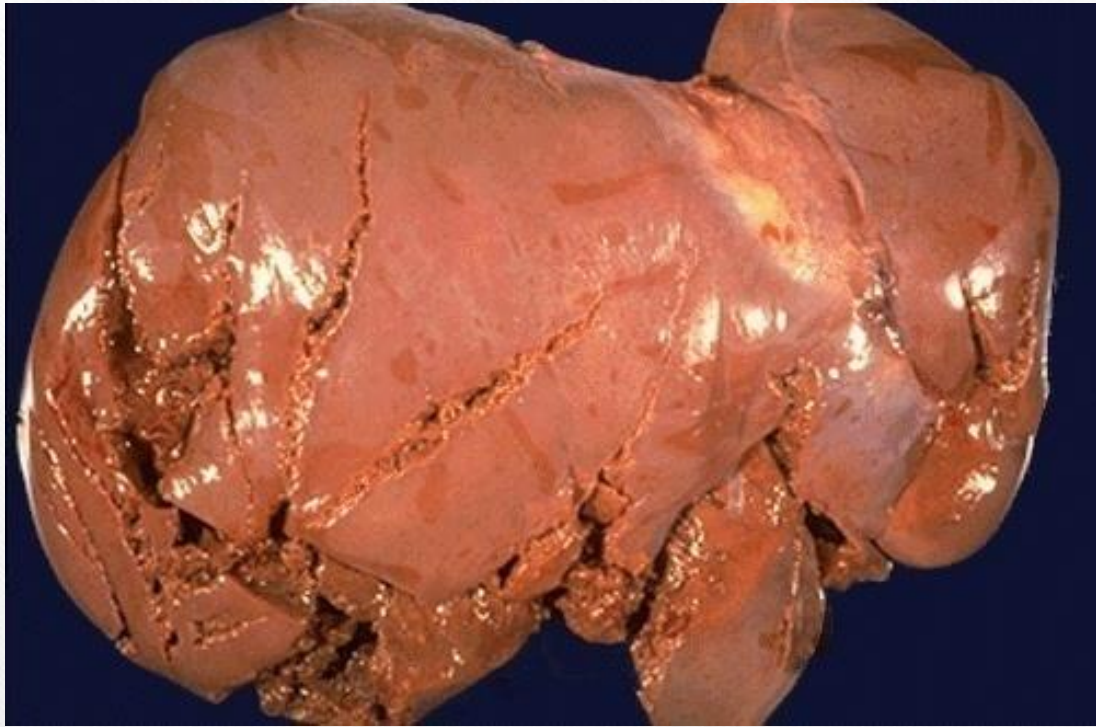
- Blows, falls, RTA
- Penetrating stab injuries, missiles from firearms and explosions
- Blast waves of explosions – small and large intestine

Penetrating abdominal injury



Injuries to the liver, Spleen and Kidneys

- Blows, falls, RTA, fractured end of a rib
- Penetrating stab injuries, penetrating missiles from firearms and explosions
- Mechanical trauma to the lumbar areas in the form of blows, kicks to the loin, RTA, falls - kidneys



Massive abdominal blunt force injury often leads to liver injury, since it is the largest internal organ. Note the multiple lacerations seen here over the capsular surface of the liver.



Injuries to the urinary bladder

- Blunt trauma to the suprapubic region of the abdomen
- Stab injuries, penetrating missiles of firearms and explosives

Male external genitalia

Circumstances include

- Direct mechanical trauma
- Saddle injuries in cyclists
- Genital trauma in torture
- During intercourse
- Revenge for sex crimes (cut or bitten off)

Emasculation



INJURIES TO THE EXTREMITIES

- May be due to blunt or sharp force
- Avulsion injuries are common in pedestrians following road trauma
- Forearms and hands are common sites for defence injuries
- The common complications are shock, haemorrhage, fat embolism, and crush syndrome.

Multiple Contusions



Bite mark





Incised defensive injuries to the hand and forearm



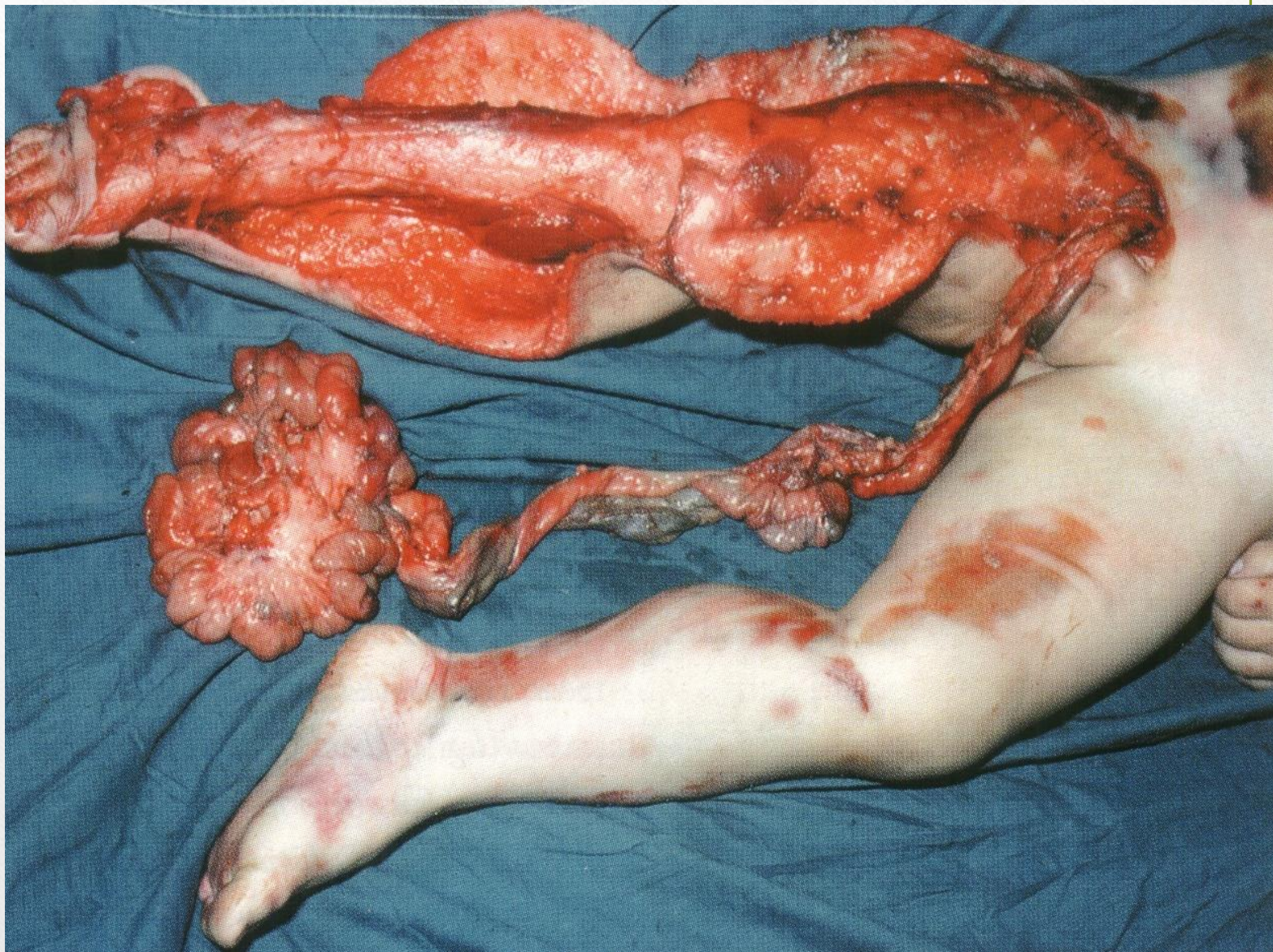






Figure 2.11 *Bilateral primary impact fractures of the lower legs, one of them compound.*





Reference

- Knight's Forensic Pathology 4th edition
- Lecture Notes in Forensic Medicine Volume I
By Dr. L.B.L.De Alwis
- Simpson's Forensic Medicine 13th Edition
- Pathology of trauma by JK. Mason

THANK YOU