Chapter 1 INTRODUCTION

Travers described the first reported pancreatic injury found in an intoxicated women struck by a stage cash wheel in England in 1927 **(*Travers B; 1927*).**

Although about two third of pancreatic injuries are caused by penetrating trauma, recently there has been an increase in the incidence of blunt pancreatic trauma, most of which is caused by steering wheel injuries ***(Haulik L; et al, 2001).***

Pancreatic trauma is relative uncommon, but it has high morbidity and mortality rates, especially when the diagnosis is delayed or in appropriate surgery is a tempted most pancreatic trauma in children result, from blunt compressive abdominal trauma sustained as a result of a direct blow e.g. sports injury, child abuse, and a heavy weight falling on the abdomen Or a fall over a rigid object, e.g. bicycle handlebars ***(Arkowitz MS; et al, 1997).***

The incidence of pancreatic injuries from mechanisms varies from 5-7% ***(Cogbill TH; 1990).***

Mortality rates after penetrating trauma Varity from 13-32% however, most death are related to associated injuries e.g. other organs and population, but it appear between the age of 15-45 years. The incidence of pancreatic trauma is directly related to population major vascular structures ***(Young PR; et al, 1988)*.**

Civilian trauma represents a major health problems its affects all age of prevalence of road accidents and levels of civilian violence occurring in approximately 10% of major abdominal trauma ***(Nilsson E; et al 1986).***

Pancreatic injuries are classified according to the organ Injury Scaling committee of the American Association for the Surgery of Trauma (AAST) into 5 grades, ranges from minor contusion and

superficial laceration without duct injury up to massive Disruption of the head of pancreas.

Injury to the pancreas must be considered, however, in all patients who sustain injury to the upper abdomens with penetrating trauma, all patients are operated on, and the diagnosis of pancreatic injury is made at the time of exploration. The diagnoses of blunt injury require a high degree of clinical suspicion, since there may be few symptoms during the initial phases of management. In first several days, the majority of patients will eventually develop epigastric and / or back pain, nausia, vomiting, illus and tenderness to abdominal palpation. Although the serum amylase concentration may be normal early, it eventually becomes elevated in 80percent of patients. An elevated amylase level by itself is generally not an indication for surgical exploration. However, the decision to operate should be supported by evidence from physical examination, abdominal ultrasonogrophy, computed tomography (CT scan) of the abdomen-magnetic resonance image (MRI), endoscopic retrograde cholangiopancreatography (ERCP). Serial determination of serum amylase levels and plain x-ray on chest and abdomen ***(Emmick RH; et al, 1996).***

These investigations for the diagnosis of intra abdominal injuries, when physical examination is not conclusive or difficult other investigation to blunt abdominal trauma is diagnostic peritoneal lavage which Shows simply whether there is blood in the general peritoneal cavity or not other recent investigation of blunt abdominal trauma is laparoscopy which evaluates the intra thoracic herniation of the abdominal organs after injures to upper abdomen and lower chest, Complications of pancreatic injuries includes pancreatic fistulas, pancreatic, pseudocysts, intra abdominal abscess, pancreatitis pancreatic ascitis and post operative hemorrhage ***(Reginold J; et al 1996).***

The majority of pancreatic injuries is minor in nature and can be managed easily and definitively with external drainage. The complexity of management increases significantly when pancreatic ductal injury is present. It is requisite that through operative work-up be complete and systematic if injury are to be properly recognized and managed. Once an injury has been detected

management guidelines based on injury classification can help to provide uniform results with minimal complications. In general; conservative management scheme is indicated, the goals of such are being preservation of pancreatic tissue and minimization of pancreatico enteric anastomses. Specific technical maneuvers may vary, but strict adherence to the basic concepts of hemorrhagic control contamination control, accurate pancreatic assessment, judicious resection and adequate drainage can help to reduce the frequency of complications from these complex injuries, ***(Jurkovich GJ & Carrico CJ 1990).***

The most common causes of death in pancreatic injuries in immediate period is bleeding, but once the acute phase had passed the mortality and morbidity should be minimal with a complete return to normal activity. The mortality rate of penetrating injury to the pancreas with associated injuries to the surrounding viscera approaches 50 percent ***(Russell RCG; et al, 2000****).*

The aim of the essay is to throw a light on the new trends in the management of pancreatic trauma and to discuss the surgery of pancreatic trauma.