

Introduction

Incisional hernia is defined as an abnormal protusion, beneath the skin, of the intraabdominal viscera through a postoperative defect of the abdominal wall (**Flament and Palot, 2000**).

The larger studies published to date highlight that incisional hernia has become a common and serious complication following any type of abdominal surgery and an important source of morbidity and mortality (**Cassar and Munro, 2002**). The morbidity, including incarceration and strangulation, is as high as 15% as they have the propensity to enlarge and are frequently formidable to repair (**Schwartz, et al., 1999**).

It has been reported, as many as 20% of patients undergoing laparotomies develop incisional hernia (**Luijendijk et al., 2000**). However, the incidence of incisional hernia was in the range of 2-13% (**Clemente and Burgos, 1998**).

Generally, incisional hernias occur as a result of inadequate healing of a previous incision or excessive incision or excessive strain at the site of an abdominal wall scar. There is considerable evidence that incisional hernia develops because of early postoperative separation of the aponeurotic edges, usually because of an early wound dehiscence or infection. Therefore, the understanding of the process of wound healing and the factors affecting it now forms the basis of the current conception to the mechanism of wound failure and incisional hernia formation (**Israelsson, 2000**).

Several studies have shown many aetiological factors that predispose to incisional hernia which are related to the patient, the surgical technique, the suture material, and the experience of the surgeon (**Burnard and Young, 1999**).

Wound infection is the most common causative factor in the development of incisional hernia. Infection in the early postoperative period may lead to failure of wound healing and subsequent weakness of the incision (**Condon, 1995**).

This close association between sepsis and wound breakdown means that future attempts to reduce the complications associated with abdominal incisions must be directed towards reducing this factor, or overcoming its influence (**Ellis et al., 1984**).

Incisional hernia may lead to many complications as **irreducibility**, this results from the small aperture at the neck of the sac and eventually the development of adhesions of omentum or intestine to the hernial sac, **obstruction**, a sudden increase in abdominal pressure may precipitate the intestinal obstruction, **strangulation**, the contents of a hernial sac may be said to be strangulated when the blood supply is impaired, partial occlusion leads to venous congestion, complete occlusion will produce gangrene. (**Cuschieri et al., 1995**).

The treatment of incisional hernia is a current problem in modern surgery. In spite of the frequency of the condition and its potential morbidity, no consensus on the best treatment has been forthcoming. Many queries about incisional hernia repair are yet to be answered, especially the choice of the surgical technique and its adaptation to the individual patient (**Korenkov et al., 2001**).

A wide spectrum of surgical techniques, have been developed and recommended, ranging from the sutured techniques to the use of various types of prosthetic mesh and laparoscopic repair. They all aim to close the defect and to strengthen the musculofascial tissues to avoid recurrence. Actually, repair of incisional hernia is an ongoing challenge in surgery. **(Cassar and Munro, 2002).**