Introduction

Acute inflammation of the vermiform appendix is probably as old as man (**Williams and Kapila, 1991**). Acute appendicitis is, above all, a disease of young persons (**Peltokallio and Jauhiainen, 1970 and Peltokllio and Tykka, 1981**).

Acute appendicitis is almost common during later childhood and early adult life. The mean age range in pediatric population is 6 to 10 years, but appendicitis is encountered in newborns and infants as well as older children (**Raffensperger, 1994**).

In developing countries, the incidence of appendicitis now appears to be increasing (**Danial and Mersha, 1991**).

Appendicitis is the most common condition for which emergency abdominal surgery is required in childhood (**Hartman, 1996**).

The true incidence of acute appendicitis is unknown (**Ellis, 1997**). But the incidence among those aged 10 to 19 years was at 23.3 cases per 10,000 population per year (**Silen and Tracy, 1993**).

Korner,et al in 1997 noted that the crude incidence of acute appendicitis was 86 per 100,000 per year.

Acute appendicitis is almost always caused by some obstruction of the lumen. Non obstructive appendicitis is rare, in some reported cases fecaliths have probably become dislodged (**Wagner, et al., 1996**).

Appendicitis classically passes through three pathological stages. First, acute obstruction with increase in intraluminal pressure because the mucosal cells continue to elaborate mucus. Compression of mucosal vessels causes ischaemia, necrosis and ulceration. Second, bacterial invasion and infection of appendiceal wall. Third, necrosis and perforation

of appendiceal wall with fecal contamination of the peritoneum (**Hartman, 1996**).

In the younger child the progression of the disease is generally so rapid that the first of three pathologic stages usually passes before medical attention is sought. In the older child the omentum and adjacent ileum usually adhere to inflammed appendix prior to perforation and prevent widespread fecal spillage with a localized abscess usually in the right iliac fossa but occasionally low in the pelvis (**Andersson, et al., 1994**).

Acute appendicitis in childhood can be a difficult disease to diagnose (**Lau, et al., 1984 and Quiros, et al., 1997**)

Quick and accurate diagnosis of acute appendicitis is still a major problem, so every attempt should be made to increase diagnostic accuracy. (**Malone, et al., 1993**) .

Clinical accuracy in the diagnosis of acute appendicitis varies from 50% to 80%, the diagnosis is especially difficult in the very young. (**Wade, et al., 1993**) .

Some senior surgeons can diagnose acute appendicitis accurately in over 80 per cent of cases, however, in most cases it is more junior surgeons who are responsible for deciding whether a patient with right iliac fossa pain should be operated upon or not . Their decision may be wrong about 50 per cent of the time . (**Surana, et al., 1993**).

Nezhat and Nezhat in 1991, found that the rate of removal of histologically normal appendix was 52% of the cases in which appendicectomy was performed.

The removal of a histologically normal appendix, is not inexpensive as it carries with it a complication rate not much lower than that after removal of pathological appendix .(**Wager, et al., 1996**).

The operation of negative appendicectomy is accompanied by the usual spectrum of immediate postoperative complications in up to 15% of patients. (**Pearl, et al., 1995).**

Some patients may even die after negative appendicectomy. Additional patients may suffer late complications such as intestinal obstruction, incisional hernias and sterility due to fimbrial adhesions (**Malone, et al., 1993**) .