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RECURRENT INGUINAL HERNIA

THESIS

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for the master degree of surgery (M. sc.)

BY

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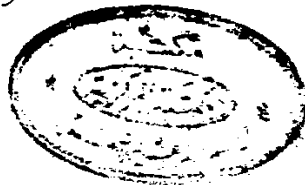
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INTRODUCTION

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- Hernia is an ancient malady, as old as man himself.
- It is amongst the 1st diseases to be recognised. Possibly due to the fact that the lesion it produces is readily accessible to sight and touch. The early recorded mention of hernia is found in the Egyptian Ebers papyrus which dates back to about 1500 B.C. (Zimmerman 1967).
- In its essence a hernia represents a disparity between the intra-abdominal pressure and the strength of the retaining abdominal wall. This results in escape of abdominal contents through the weak portion of the wall. All abdominal viscera with the possible exception of pancreas have been found in the various types of hernia.
- Inguinal hernia is by far the commonest of all external abdominal hernia .

- It affects both sexes, all races and all ages of human beings. It is much more common in ♂ than in ♀. This is due to the embryological phenomena associated with the migration of the testicles through the inguinal canal and the presence of the cord, which add more weakness to the canal.
This together with the liability of inguinal hernia to complication merit serious attention for hernia.
- All agreed about the importance of early surgical treatment. Delay will end in a larger defect which will be associated with weakening of the structures of the abdominal wall in this area and increasing the rate of recurrence.
- A recurrent hernia is one which recur following an operation for a similar type of hernia.
A great deal of confusion surrounds this subject of recurrence as regard the incidence of failure, causes of recurrence. The best words said in this subject were those of (Zimmer man 1967) :

" Many so called recurrent hernias in fact are not recurrent. They are frequently 2 ry hernias which were left unrepaired at the original operation or are new hernias produced by the operation " .

From the practical point of view it makes very little difference whether a hernia which develop at the site of a previous operation is an actual recurrence of the original hernia, a new hernia resulting from the operative trauma or a coincidental hernia which could and should have been removed at the original operation.

- In any of these conditions the operation has failed its original purpose to the disappointment of the pt. and the annoyance of the surgeon.

AIM OF WORK

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This thesis aims to study the main etiological factors that may participate in the recurrence of inguinal hernia. Trial will be done to reach the causes of recurrence and different operative methods are to be applied.

- Assessment of different results are to be made and emphasis is to be done on the most suitable methods.

ANATOMY

ANATOMY OF THE INGUINAL REGION

- The abdominal wall is formed anteriorly by five pairs of muscles and by aponeurosis which serve as their tendons.
- The two recti muscles and the two pyramidales are situated anteriorly. The recti are placed parallel to the middle line and extend vertically from the pubic bones to the lower margin of the thorax.
- Laterally, on each side three musculo-Aponeuratic strata complete the wall from the surface inwards :
 - (a) The external oblique.
 - (b) The internal oblique.
 - (c) The transversus abdominis.

These muscles are arranged in different directions. The two oblique muscles and the transversus are prolonged to the middle line in the form of aponeurosis. The union of the aponeurosis of the opposite sides forms the linea alba which extends

in the middle line from the pubic symphysis to the xyphoid process.

- Underneath these muscle there is a layer of fascia termed the transversalis fascia, this layer is separated from the underlying peritonium by a condensation of extra peritoneal fatty tissue.

A) External oblique muscle:

This muscle arises by 8 digitations from the outer surfaces and lower borders of the lower 8 ribs.

The posterior fibers are vertical and descend to an insertion into the anterior half of the external lip of the iliac crest. All of the superior and middle fibres end in a strong aponeurosis. Inferiorly the aponeurosis is stronger and broader. Along the lower margin the aponeurosis is attached supero-laterally to the anterior superior iliac spine and infero-medially to the pubic tubercle forming the inguinal ligament.

The inguinal ligament:

This is simply the lower border of the aponeurosis of the external oblique being folded backwards upon itself. It has a round surface towards the thigh and a grooved surface towards the abdomen.

Superficial inguinal ring:

It is merely an interval left between that portion of the external oblique aponeurosis which (as the ligament) is inserted into the pubic tubercle, and that part which is inserted into the front of the pubic bone (Zimmer man 1967). It is a triangular in shape with its long axis lies oblique and corresponding with the course of the fibres of the aponeurosis. Its length is 2,5 cm from the base to the apex and breadth at the base is 1.25 cm.

It has:

- (a) a base formed by the pubic crest. The aponeurosis is not attached to it.
- (b) The upper the lateral one is thick and curved to receive the spermatic cord in C.

It is formed by that portion of the inguinal ligament which is inserted into the pubic tubercle. The medial crus is thin flat band. The fibres of which are attached to the medial part of the pubic crest along side the symphysis pubic and interlace with the fibers of the opposite crus.

- (c) Apex: which is the meeting of the two crurae. At the point of junction of the crurae, there are shining fibres, running at right angles across the ext. oblique aponeurosis. They blend the two crurae together and serve as a visible landmark to the superficial ring during operation. These are the intercrural fibres.

The superficial ring is much larger in men than in women. This is could be accounted to the size of the spermatic cord.