



ORIGINAL RESEARCH PAPER

General Surgery

WANTZ PROCEDURE

KEY WORDS: Hernia. Wantz procedure, mesh, preperitoneal space

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ABSTRACT

Wantz procedure is the deployment of mesh in the preperitoneal space. Repair of the hernia is achieved by pure tissue approximation or by tension-free mesh repair. The most commonly performed tissue repairs are those of Bassini, Shouldice, and to a lesser extent McVay. In the tension-free mesh repair category, the mesh is placed in front of the transversalis fascia, such as with the Lichtenstein tension-free hernioplasty, or behind the transversalis fascia in the preperitoneal space, such as during the Nyhus, Rives, Read, Stoppa, Wantz, and Kugel procedures. 65 year old male patient admitted with left sided recurrent inguinal hernia . Intraoperatively identified left direct,indirect and femoral hernia components. Hence proceeded with Wantz procedure

Introduction

The major weak point of all surgical techniques for inguinal hernia repair is the possibility of recurrence. This problem has highly influenced hernia surgery since Bassini s technique, the most rational anatomic repair. It is only in the recent past that the incidence of recurrences has drastically dropped with the introduction of Shouldice repair, and above all using prosthetic material with anterior, preperitoneal, and laparoscopic approaches.

Case report:

65 year male presented with complaint of swelling in the left inguinal region - 6 months.

Patient underwent left hernioplasty 2 years back.

Patient is known alcoholic and smoker.

On examination:

General condition stable. Pulse rate-82/m .BP-130/90mmHg. SPO2-98% in room air.

Examination of left inguinal region:

- Swelling of size 20x20 cm over the left inguinal region.
- Irregular in shape.
- Swelling extends from inguinal region till the upper one third of left thigh.
- Surface is irregular.
- Not warm ,not tender.
- Swelling is partially reducible.
- Cough impulse present.

CT abdomen: 5.4 cm defect in the left inguinal region with omentum and bowel as content.

Clinical diagnosis of left recurrent inguinal hernia/? Left femoral hernia made.

Intra operative findings:

- Cord structures dissected from sac.
- One Sac found below the inguinal ligament arising from left femoral canal adherent to left femoral vessels.
- Another sac present above the inguinal ligament with wandering mesh..

- Content - small bowel and omentum.
- Content is reduced into the peritoneal cavity.
- Sac is transfixed. Intraoperative femoral hernia identified. Hence proceeded with Wantz procedure.
- Preperitoneal space is created by dissecting the Space of Retzius and space of Bogros .
- 15x15 cm prolene mesh is placed over the PREPERITONEALSPACE.
- Mesh fixed at coopers ligament and superolaterally at the anterior abdominal wall.
- Conjoint tendon and inguinal ligament approximated using 2-O prolene.
- Suction DT kept.



Fig1:pre operative picture



fig2:cord structures dissected.



fig3: mesh fixed in preperitoneal space

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Discussion:

The preperitoneal approach desirably and advantageously permits direct exposure to transversalis fascia without disturbing the inguinal canal structures and allows restoration of the integrity of this layer in an anatomical, tension-free, and sutureless manner. The essential feature of prosthetic versus nonprosthetic repair of inguinofemoral hernias is the replacement of the transversalis fascia by a large mesh that extends far beyond the borders of myopectineal orifice and thus rendering the actual repair of myopectineal orifice unnecessary. Therefore, the indications for preperitoneal prosthetic repair include all recurrent and multiply recurrent groin hernias, and bilateral hernias in older patients.

Fruchauds myopectineal orifice:

It is the weak spot where all groin hernias begin. It is covered only by transversalis fascia and includes Hasselbach triangle, deep inguinal ring and femoral triangle.

In Wantz procedure, mesh is placed over the pre peritoneal space covering myopectineal orifice with extensive overlap in all directions.

Mesh placed in this space is compressed by internal abdominal pressure and fixed against the abdominal wall.

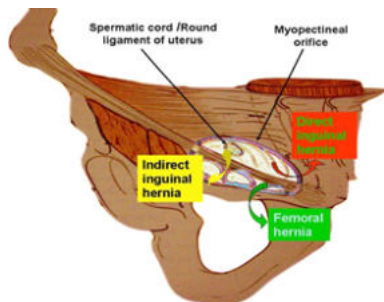


fig4:myopectineal orifice

Conclusion:

- Wantz Procedure is used for all the three types of groin hernia repair.
- Increased Intra abdominal pressure is the cause for hernia. But in cases of Wantz procedure Intra abdominal pressure keeps the mesh in preperitoneal space.
- Lower incidence of damaging the nerves, femoral and iliac vessels.
- Wantz procedure gives better vision to isolate the sac and to show the unknown hernias.

References:

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