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Combined hysterectomy and incisional hernia repair

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CASE STUDY

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ABSTRACT

Background

Ovarian cyst is common finding in female. It occurs mainly after menopause. Ovarian cysts are fluid-filled sacs in the ovaries. Some of them contain fabric inside. The cysts are generally the size of a cherry and are surrounded by a capsule. The majority of ovarian cysts disappear on their own. Cysts are commonly formed as a result of natural hormonal changes throughout puberty or menopause. Ovarian cysts affect around 10 out of every 100 women. They are usually non-cancerous (benign) and rarely cause issues, they are rarely treated. It is necessary to get surgery. In these instances, we conducted hysterectomy and b/l salpingectomy.

C-section is a surgical procedure that can create a weakness in the abdominal wall. A hernia occurs when part of intestine or stomach protrudes outward through this weakened area.

Patient was diagnosed with incision hernia and ovarian cyst and total abdominal hysterectomy, b/l salpingo oophorectomy, and incisional hernia repair were done.

Case Description

A 45-year-old female with Para-3, live-2, death-1 was referred to AVBRH with complaints of pain in abdomen which was insidious on onset, gradually progressive, the pain was intermittent type dull aching in nature arising from right iliac fossa and radiating towards back. A vertical scar of approximately 8cm was present over the abdomen and pigmentation was present over the scar mark. On USG abdomen pelvis reveals large right ovarian cyst with thin internal septa. CECT abdomen reveals pre umbilical hernia with entrapped fat and bowel loops with no obvious sign of obstruction and large right ovarian cyst of size 10.5x4.9cm arising from the right ovary with a thin septum within. Left ovary is normal.

Objective

We performed total hysterectomy of abdomen with incisional hernia repair and b/salpingo oophorectomy.

Key Words

Ovarian cyst, Pre umbilical hernia, Abdominally stereotomy, Salpingo-oophorectomy, Incisional hernia repair

Introduction

Total abdominal hysterectomy, b/l salpingo oophorectomy, and incisional hernia repair were done. Hysterectomy is a surgery to remove the uterus and cervix. . The surgical method that will be employed is called "abdominal." This indicates that the procedure will be performed through an abdominal incision. The ovaries and fallopian tubes of both sides are removed in a bilateral salpingo-oophorectomy. Both hysterectomy and bilateral salpingo-oophorectomy will be performed at the same time. The uterus, cervix, ovaries, and fallopian tubes will all be removed during this operation.

Laparoscopic b/l salpingo oophorectomy- This is a procedure in which your doctor removes both of your ovaries and fallopian tubes using a thin, illuminated camera and a small surgical instrument inserted through a short (1/2inch) incision commonly in the belly button. Two to three more tiny incisions will be made on the lower abdomen to aid with the procedure.

A cyst is a fluid-filled or semisolid substance-filled abnormal membranous sac. There may also be some blood or calcification present. They're commonly triggered by trauma or any condition that causes the body's natural fluid flow to

be obstructed. Cysts can form anywhere on the body. They've even found their way into critical organs including the brain and spinal cord. Those that appear on the ovaries are known as ovarian cysts.

The presence of cysts in the ovaries is a widespread gynaecological issue. They are usually asymptomatic, especially when they are tiny. They're seen in women with polycystic ovary syndrome (PCOS). These women are having number of small tiny cyst on ovaries. PCOS causes irregular menstrual cycles, infertility, and a slew of other issues. Cysts are commonly regarded as benign, despite the fact that they are capable of producing severe and unpleasant symptoms. Ovarian cysts can occasionally exhibit signs of malignancy.

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Hysterectomy is most frequent gynaecological procedure performed for a variety of benign conditions including endometrial hyperplasia, adenomyosis fibroids, and prolapse of uterus, dysfunctional uterine haemorrhage, and intraepithelial neoplasia of the cervix. Hysterectomy of abdomen, vaginal hysterectomy, laparoscopic assisted vaginal hysterectomy (LAVH) in which a vaginal hysterectomy is aided by laparoscopic procedures that do not include uterine artery ligation, total laparoscopic hysterectomy (TLH) in which uterine artery ligation and subtotal laparoscopy using a morcellator are all options for benign disease.

C-section is surgical procedures that can create a weakness in the abdominal wall.a hernia occur when part of intestine or stomach protrudes outward through this weakened area. The covering of the anterior abdominal wall is typically thick and powerful, working to keep the abdominal cavity intact. These coverings' continuity is disturbed and physically compromised if they are interrupted by a surgical incision. The contents of the abdominal cavity can breach through the weakening in the presence of elevated pressure of abdomen and/or several risk factors (such as smoking, infection, or emergency surgery), resulting in an incisional hernia.

Muscles are strong and tight enough to hold the intestines and organs in place, but if there are any weak places, a hernia can form. The most common and costly complication following abdominal surgery is hernia after incision. And non-tender swelling at or near the site of a prior surgical wound is a typical clinical sign of an incisional hernia.

The hernia can become painful, tender, and erythematous if it is trapped. The patient may also have abdominal distention, vomiting, and/or complete constipation if they have a bowel blockage.

A mass is palpable at or around the surgical incision site on inspection, which may be reducible (depending on its severity). Look for symptoms of bowel strangulation, such as rebound discomfort or involuntary guarding. Suture repair (for extremely tiny hernias), laparoscopic mesh repair, and open mesh repair are some of the options for incisional hernia repair.

In a group where the transverse incision was the predominant technique at caesarean birth, the overall risk of an incisional hernia needing surgical hernia within 10 years following a caesarean delivery was 2 per 1000 deliveries[3,4].

Management: The patient was admitted to AVBRH hospital for surgical management. She was managed by total abdominal hysterectomy with Bilateral Salpingo Oophorectomy with hernia repair with mesh plasty. Total duration of surgery was a span of 5 hours.

General anaesthesia was given then cleaning, painting and draping done. Abdomen opens in layers. Then rectus sheath is cut and muscle separated. Uterus along with b/l fallopian tube and b/l ovaries were identified. Kelly clamps were placed on b/l round ligament cut and ligated. Then window is created between infundibulo- pelvic and ovarian ligament. b/linfundibulo ligament of pelvis is clamped, cut and then ligated.b/l fallopiantube and b/lovaries were removed. Into the incision,retractors are placed and packing of bowel was done by moist laparotomy sponges. Uterus held with straight clamps. Broad ligament was incised towards bladder reflection to the midline from both sides with Metzenbaum scissors. Bladder was gently dissected off the lower uterine segment and the cervix with a combination of sharp and blunt dissection. The uterine arteries were skeletonised b/l clamped, cut and ligated. The uterus, cervix, b/l fallopian tube, b/l ovaries were removed. Right sided fimbria cystectomy done.

Vaginal vault was closed by interlocking suture by Vicryl 1.0 haemostasis ensured. The abdomen closed in layers with sutures.

Discussion

Hysterectomy is a procedure for addressing uterine problems. Women differ in terms of the discomfort they feel, their living circumstances, and their future goals. Often, women have already made up their minds about the

therapy they want. They anticipate the gynaecologist assessing the underlying problem and educating them on the various treatment choices[5]. To that aim, the evidence base supporting the advantages and dangers of various treatments should be discussed, and patients' opinions should be solicited. Ideally, these ladies will be able to choose whatever treatment option is best for them. Shared decision making is a term used to describe this method[6].

Given the high frequency with which hysterectomy and related treatment options are done, it is desirable to reintroduce hysterectomy into a continuous monitoring programme. Alternative treatment techniques should also have their own monitoring scheme.

An operation to remove the uterus is called as hysterectomy.

For following reasons, hysterectomy may be done:

- fibroids in uterus causing pain, bleeding, or other problems
- Prolapse of uterus, which occurs when the uterus slides into the vaginal canal from its usual position.
- Ovarian, cervical or uterine carcinoma
- Endometriosis
- Abnormal bleeding of vagina
- pain which is chronic
- Thickening of the uterus or adenomyosis

When it comes to non-cancerous hysterectomy, it is typically only considered when all other therapeutic options have failed[7].

Types of Hysterectomy

- An above neck or cervical process or subtotal hysterectomy removes first half of the uterus, and leaving the cervix intact.
- A complete hysterectomy involves the removal of the whole cervix and uterus.
- The whole uterus, as well as tissue on its sides, the cervix, and the upper portion of the vagina, is removed during a radical hysterectomy. A radical hysterectomy is usually performed when carcinoma is present. (Figure 1)

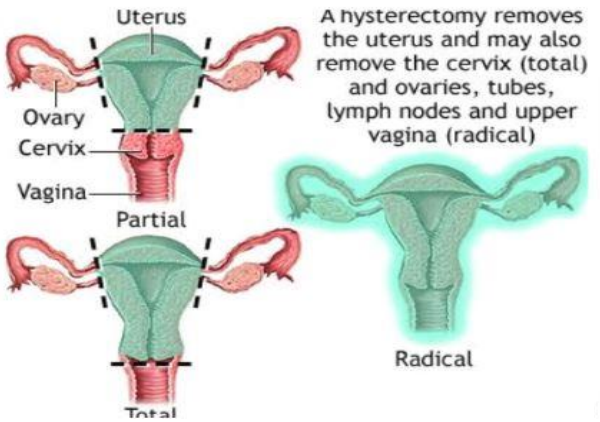

Figure 1: What Hysterectomy involves.

Oophorectomy is the process in which ovaries are removed. salpingectomy is the procedure in which we remove fallopian tubes.

Hysterectomy and bilateral salpingectomy-oophorectomy is the surgery in which complete uterus, bilateral fallopian tubes and both ovaries are removed[8].

Hysterectomy Operative Procedures

The hysterectomy approach will have a role in determining how long it takes to recover and what sort of scar, if any, remains following the procedure.

1. Traditional or open surgery and
2. MIP

Open Surgery Hysterectomy

An abdominal hysterectomy is a type of open surgery that removes the uterus from the abdomen. It is the most frequent hysterectomy method, accounting for around 54 per cent of all mild diseases.

An incision is made by surgeon of 5 to 7 inch through the belly from top to bottom or side to side to perform an abdominal hysterectomy. The uterus is subsequently removed by the surgeon.

After an abdominal hysterectomy patient need to stay at hospital for 2 to 3 days. A scar is visible at the site of incision once it has healed[9].

MIP Hysterectomy

An MIP hysterectomy can be accomplished in a number of ways:

- Vaginal hysterectomy: An incision is made in vagina and then uterus is removed from this incision then wound is closed and scar is not visible.
- Laparoscopic hysterectomy: A laparoscope has a tube which has lighted camera and surgical equipment and it is introduced through numerous tiny incisions on abdomen or on event of a single site laparoscopic intervention, a tiny incision in the navel, is used to accomplish this procedure. The hysterectomy is done from outside the body, with the surgical expert watching the procedure on a video screen.
- Laparoscopic Assisted Vaginal Hysterectomy [LAVH]: The surgical expert uses laparoscopic equipment on abdomen to aid in the evacuation of the uterus through a vaginal incision in this operation.
- Robot-Assisted Laparoscopic Hysterectomy: The surgical expert guides an advanced robotic system of surgical equipment from outside the body, similar to a laparoscopic hysterectomy. Because of modern technology, the surgeon may use typical wrist motions while seeing the hysterectomy on a 3-D screen[10].

Risks of hysterectomy

The majority of persons who have a hysterectomy have no severe issues or consequences as a result of the procedure. A hysterectomy, on the other hand, is a significant procedure that comes with its own set of risks. The following are examples of complications:

- Prolapse of vagina (part of vagina that protrudes from the body).
- Inability to control the flow of urine and involuntary urination.
- The development of vaginal fistulas (an unusual connection that forms between the vagina and the bladder or rectum)
- Suffering from chronic discomfort

Wound infections and blood clots, haemorrhage, and damage to adjacent organs are other possible side effects of hysterectomy, albeit these are uncommon[11-16].

Incisional Hernia

The reasons behind the occurrence of an incisional hernia after a C-section delivery depend on a variety of factors. Some of these can be surgery-related, while a few may be linked to the physical characteristics of the woman. Following are the reasons for a hernia in women after a C-section delivery:

- Women who have weaker abdominal tissue may fail to keep the abdomen in place, increasing the risk of a hernia.
- The presence of gestational diabetes during pregnancy can increase the chances of a hernia.
- If you are overweight, the pressure on the abdomen throughout pregnancy and delivery is higher than usual, which increases the chances of pushing the lining through the incision.
- Certain cases deem it necessary to make the incision larger than usual for a successful delivery, which increases the chances of a hernia.

Such hernias make themselves evident only in physical appearance, and these have to be corrected through external intervention alone.

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