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Case Report

Avoid - Hysterectomy - A Long Term Consequence of Tubal Ligation in Young Women

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Abstract

Hysterectomy is a most common surgical procedure performed on women to remove the uterus and the cervix. In total abdominal hysterectomy with bilateral salphingo-oophorectomy a surgical operation is used to remove the uterus, cervix, fallopian tubes and both ovaries. This surgical procedure is usually done to minimise complications of the conditions like Uterine fibroids, Uterine prolapsed, Cancer, cervix, or ovaries Chronic pelvic pain Pelvic inflammatory disease (PID), Endometriosis, Ovarian mass, ectopic pregnancy and adenomyosis. The surgery is usually performed under general or spinal anaesthetic.

Female sterilisation is one of the most widely used contraceptive procedures, with over 180 million women worldwide using it. Globally and in the United States, female sterilisation is 2.5- to 4-times more widespread than male sterilisation and in India it is about 99 percent of overall sterilisation since early 1990s.This long-term effect of female sterilisation, which is commonly performed on healthy women of reproductive age, poses a number of concerns. Concerns about the decision-making process and the occurrence of long-term negative effects are among them. In India the commonest cause of concern for over 5 decades has been tubal ligation operation among young women under the age of 30 years. There are multiple studies both in India and abroad indicating that nearly 50% of such young women had to be subjected for hysterectomies due to intractable menorrhagia problems

We present one such case of 37 years old women who had to undergo a total abdominal hysterectomy with bilateral salphingo-oophorectomy after 15 years of female sterilization. She presented with complaint of severe menstrual bleeding and pain for the past 1 year and in her last 2 menstruation cycles she had severe pain with heavy blood clots and fainted. The severity of these symptoms made her to seek medical care.

The current case study looks at how sterilisation affects other elements of women's health. Menstrual cycle alterations, hysterectomy, bone density, the risk of sexually transmitted disease, sexuality, and preventative treatment are all examples of these.

Keywords: Tubectomy/Female Sterilization; Menorrhagia; Hysterectomies; Total Abdominal Hysterectomy with Bilateral Salphingo-oophorectomy

Introduction

The most common surgical operation performed on women is hysterectomy to remove the uterus and the cervix.Abdominal approach is the surgical technique commonly used to remove the uterus, Total abdominal hysterectomy is a treatment that comprises the removal of the cervix, body, and fundus of the uterus (TAH).

TAH with removal both ovaries and fallopian tubes is called TAH with bilateral salphingo-oophorectomy done simultaneously during one procedure. abdominal is the surgical technique that will be used to remove the uterus. If the surgical procedure involves the removal of cervix, body and fundus of the uterus then it is called total abdominal hysterectomy a bilateral salpingo -oophorectomy is a surgical procedure to remove both of the ovaries and fallopian tubes. The hysterectomy and bilateral salpingo-oophorectomy will both be done during one procedure.

Partial, complete, and radical hysterectomy are three different forms of hysterectomy. The upper section of the uterus is removed in partial hysterectomy, while the cervix is left in place. Including the cervix, the entire uterus is removed during a total hysterectomy. And in radical hysterectomy, entire uterus and tissue on the sides of the uterus, the cervix, and the upper portion of the vagina are removed. In the case of cancer, most women are advised to have a radical hysterectomy.

The average age of hysterectomy in India is 34. A woman who has a hysterectomy will no longer have monthly menstrual cycles or be able to conceive [1].

Adopted by more than 180 million women worldwide, female sterilization ranks as one of the more popular contraceptive methods. Globally and in the United States, female sterilization is 2.5- to 4-times more prevalent than male sterilization and in India it is about 99% of total sterilization since early 1990s. Until recently, tubal sterilisation treatments that were medically preferred required a transabdominal approach known as mini-lap sterilisation. Female sterilization was done both as post-partum and interval (when not pregnant) in Indian Family Planning program from early sixties. Since 2000, India, Australia, Singapore, portions of Europe, Canada, and the United States have approved transabdominal laparoscopic tubal sterilisation and trans cervical technique.

Sterilization is a long-term contraception method. This long-term nature, along with the fact that this treatment is typically performed on healthy women of reproductive age, raises a number of concerns. Concerns about the decision-making process and the occurrence of long-term negative effects are among them [2].

The current case study looks at how sterilisation affects other elements of women's health. Menstrual cycle alterations, cancer incidence, hysterectomy, bone density, the risk of sexually transmitted illness, sexuality, and preventative care are some of the topics covered. There are multiple studies both in India and abroad indicating that nearly 50% of women had to be subjected for hysterectomies due to intractable menorrhagia problems This case discusses the topics listed here considering how-to best counsel and support patients throughout their decision-making process.

Though not all women will regret their decision to have their tubes tied, some will. Women's feelings of regret may be influenced by their age at the time of the surgery, which is commonly 30 or younger, as well as unforeseen life events such as the birth of a child or the death of a spouse. If a woman chooses sterilisation due to pressure from a partner or for a medical reason, she may have regrets. When considering a tubal ligation, every woman should consider the complete spectrum of contraceptive alternatives available to her, as well as what is best for her.

Tubal ligation can result in a variety of menstrual alterations. The blood flow to the ovaries may be disrupted or diminished, resulting in ovarian dysfunction and changes in the production and/or release of oestrogen and progesterone by the ovaries. Endometrial dysfunction may result from interference with the direct diffusion of oestrogen and progesterone from the ovaries to the uterus. Another possibility is uterine vascular congestion [3].

In India as a whole, 6% of women aged 30-49 years had undergone a hysterectomy. The percentage of women who had undergone the surgery differed significantly between states and UTs (2 percent in Lakshadweep to a maximum of 16 percent in Andhra Pradesh). In India, six out of every 100 women aged 30 to 49 have had a hysterectomy, according to the findings. In the age group 45-49 years, the prevalence is around 11 per 100 women [4].

The majority of bilateral oophorectomies occur during hysterectomy, and the majority of hysterectomies occur between the ages of 35 and 45, with more than half of all hysterectomies occurring in women under 45. A hysterectomy was reported by 11% of women aged 45 and up who were surveyed as part of an ageing study [5].

The estimated incidence of hysterectomy, 20.7/1000 woman-years based on a study done in Gujarat. There was substantial evidence that after 5-10 years of sterilisation, women of reproductive age with poorer income and at least two children underwent hysterectomy at greater rates. Excessive menstrual bleeding/pain was the most common reason for hysterectomy (56 percent), followed

by fibroids/cysts (20 percent). As a result, ovarian hormone shortage in premenopausal women is most commonly caused by surgical primary ovarian insufficiency (POI). Despite the fact that the incidence of hysterectomies has decreased in recent years, more than 200,000 women in the United States still get bilateral oophorectomy every year [6].

Case Presentation

On the morning of 24 January 2012, a lady, 37 years old consulted private obstetric and gynaecological nursing home with complaint of severe menstrual bleeding. She had pain and heavy menstruation and dysmenorrhea for 6 years and was consulting general physician and took analgesics during menstruation. It aggravated for past 1 year and in her last 2 menstruations she had severe pain with heavy blood clots and fainted. These symptoms made her to seek medical care.

History of present illness or present health

7 months prior to admission the patient experienced abnormally heavy prolonged menstruation and dysmenorrhea as well. She reported 5 cotton clothes fully soaked per day and sometimes it increased to 6 feminine pads in her regular 5 days period, and it increased to 7 days accompanied with the heavy menstrual pain and no consultation occurred.

2 months prior to the admission there was persistence of above symptoms and the patient consulted the doctor. Based on an ultrasound that showed anteverted uterus measurimg 9.2*4.9*6.5 cm non homogenous myometrial echoes and irregular border, cystic right and left ovaries. After these findings she was scheduled for an operation to remove uterus, fallopian tubes, and ovaries. The patient was admitted to the hospital 6 days before her scheduled operation.

Past medical history

She is a housewife and framerate who considers daily household chores and agricultural work to be her exercise. before marriage she didn't experience any serious illness and also she didn't have any accident or injury in the past. she had a family planning surgical procedure (tubectomy) 15 years ago in her third birthing preceded by caesarean section operation.

Her menarche started at the age of 12 and her last menstrual period was 18 June 2012. she is Gravida (G) 3 and Para (P) 3; G1-1992 girl 6 lb, G2-1994 girl 9 lb, G3-1996 boy 7 lb.

Family history - her mother died due to uterine cancer and patient doesn't recall the cause of father's and grandparent's death.

Pre-operative clinical and laboratory findings

Weight - 39 kg, Height -151cm, Built - short and lean

Calculate BMI-17.1kg/m^2.

Investigations done

- Ultrasonography of whole abdomen, KUB and pelvis
- Echocardiography - bradycardia, normal study.

Laboratory findings

- HB%-11% g, Blood group A positive, BT - 2 min 01 sec, CT -3 min 51 sec
- RBS - 91.3 mg/dl, Serum Creatinine - 0.86 mg/dl
- Hbsag and HIV-negative
- Urine routine - Colour- pale yellow, Appearance- clear, Protein - absent
- Sugar - nil, Pus cells - 01-02/hpf.

Figure 1

Figure 2

Proposed surgical procedure

Total abdominal hysterectomy with bilateral salphingo- oophorectomy.

Therapeutic procedure

Under spinal anaesthesia total abdominal hysterectomy with bilateral salphingo oophorectomy was done on 28/1/2012.

Surgical procedure

The procedure is carried out with the patient in a supine position. Patient laid in supine position and urinary catheter was inserted for continuous bladder drinage. Spinal anaesthesia administered with aseptic precautions in left lateral position.

A pelvic exam is routinely performed. The upper abdomen is probed by visually and palpation to identify any adhesions or masses, and adhesions are freed to enable appropriate exposure of the pelvic cavity and the surgeon enters the peritoneal cavity through a lower transverse incision in the abdomen. The round ligament is identified, clamped, and transfixion sutured, and the anterior leaf of the broad ligament is incised toward the internal os, with bilateral incisions meeting in the midline. The posterior broad ligament is tented upward in the avascular space lateral to the uterus, posteromedial to the adnexa, and anterior to the ureter, in the avascular space lateral to the uterus, posteromedial to the adnexa, and anterior to the ureter. The ovary as well as the fallopian tube are removed.. To expose the bladder reflection and penetrate the vesicocervical region, the bladder flap is created by raising the anterior peritoneum and withdrawing the uterus cephalad. The uterosacral ligament is cut and ligated, the paracervical tissue and uterosacral ligaments are ligated and tied, the vagina is opened, the uterus and cervix are removed, the vagina is closed with an absorbable suture, and hemostasis is confirmed, peritoneal cavity and abdomen suturing is done with layers, and aseptic dressing is done (from the case sheet notes)

Postoperative period

Postoperatively patient was stable with normal vital parameters and patient was put in foot end elevation position and patient was hemodynamicaly stable so discharged on 1/2/2012 with continued medication and follow up after 2 weeks. No pre or post operative complications.

Medicine given

- Inj-monocef 1g, Inj-metro, Inj-diclo, Inj -RL, DNS, 5% Dextrose
- Tablet -alerpant 10 mg, Tablet-retecef 200mg, Tab- Cipzen-D, Tablet- kolget -D
- Syp-Bedex

Advice on discharge -

- Fungigen spray, Tab- cipzen -D, Syp-Bedex
- Chocomix nutrition powder for 15 days.

Discussion

After a caesarean section, the hysterectomy is the second most common major surgical procedure performed on women globally. According to a research conducted in the western state of Gujarat, 7-8 percent of rural women and 5% of urban women had undergone hysterectomy by the age of 37. Every year, a significant number of abdominal hysterectomies are performed in India. The majority of these procedures are done to treat benign conditions such AUB, fibroid uterus, and ovarian cysts, which cause menorrhagia, metrorrhagia, dysmenorrhea, or pelvic pain [7].

In India, 3.2 percent of women had hysterectomy operations, with Andhra Pradesh (8.9%) having the greatest prevalence and Assam having the lowest (0.9%). Rural India had higher a prevalence than urban India. Most women underwent the operation in private hospitals. Hysterectomy prevalence ranged between 3% and 5% in 126 districts, 5% and 7% in 47 districts and more than 7% in 26 districts. However comprehensive assessment of hysterectomy prevalence and its correlation are missing at the national and state levels.

In India, only predicted figures based on the 2004 international data source are available. According to this, out of 1,065,070,607 women, 2,310,263 (2.16 per 1,000) have had a hysterectomy [8].

Women who go through premature or early menopause, whether as a result of bilateral salpingo-oophorectomy or primary ovarian insufficiency, lose oestrogen and other ovarian hormones early. Menopause that occurs too soon or too early has long-term consequences for cognition, mood, cardiovascular, bone, and sexual health, as well as an increased risk of early mortality.Hormone therapy has been demonstrated to reduce some of these dangers, but not all of them. As a result, several medical associations advise that hormone therapy be continued at least until menopause occurs naturally. Individualizing hormone therapy for women with early oestrogen insufficiency is critical, and greater dosages may be required to achieve physiological concentrations similar to those reported in premenopausal women. It's also important to think about the psychological repercussions of early menopause, as well as the possibility of fertility and the necessity for contraception if the ovaries are healthy [9].

Outcome and follow up

On 17th February 2012 patient visited hospital for follow-up. The wound was completely healed patient was advised to do minimal physical exercises and proper diet and medications.

On 15th October 2012 patient visited to hospital again as she was feeling lower back pain for a week. Doctor prescribed simple analgesics, calcium tablet and protein powder.

2012 -2019:

- Annual follow-ups for 5 years revealed that she was not having any health issues.
- 2019: In the year 2019 she was having giddiness, tiredness and fainted while farming work. She consulted a private Physician and was found to be suffering from low blood pressure, a treatment for 2 weeks and advise she recovered and had no problem till day.
- January 2022: As per last case follow-up patient is healthy and fit, able to perform agricultural work along with her daily activity.

Conclusion

There are multiple studies both in India and abroad indicating that nearly 50% of women had to be subjected for hysterectomies due to intractable menorrhagia problems This case discusses the topics listed here considering how-to best counsel and support patients throughout their decision-making process.

Though not all women will regret their decision to receive a tubal ligation, others may. Women's feelings of regret can be influenced by their age at the time of the surgery, which is generally 30 or younger, as well as unforeseen life events such as the birth of a child or the death of a spouse. If sterilisation was forced upon them by a partner or was done simply for medical reasons, some women may have regrets. Consider your entire range of contraceptive alternatives before considering a tubal ligation, and which one would be best for you.

Tubal ligation can result in a variety of menstrual alterations. The blood flow to the ovaries may be disrupted or diminished, resulting in ovarian dysfunction and changes in the production and/or release of oestrogen and progesterone by the ovaries. Endometrial dysfunction may result from interference with the direct diffusion of oestrogen and progesterone from the ovaries to the uterus. Uterine vascular congestion is another option.

Take Home Message/Learning Outcomes

- In India, hysterectomy is a typical gynaecological condition treatment for low-income women.
- The unusually young age of hysterectomy, 34-36 years, has serious consequences for women's health
- The normalisation of hysterectomy is due to the lack of primary therapy for gynaecological problems, as well as attitudes about the uterus as a disposable organ after pregnancy.
- Total abdominal hysterectomy with salphingo- oophorectomy is a common gynaecological procedure to treat ovarian cysts
- Proper care, treatment and preoperative optimization of patient can reduce the risk
- Proper diet containing sufficient nutrients after surgery helps to maintain health.

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