About Tubal phimosis

Tubal phimosis refers to a situation where the tubal end is partially occluded (Pic. 1), in this case fertility is impeded, and the risk of an ectopic pregnancy is increased. Most commonly a tube may be obstructed due to infection such as pelvic inflammatory disease (PID). In addition, also the end of fertile life (early menopause) can be a source of such injury.

Tubal phimosis can lead to a hydrosalpinx (a distally blocked fallopian tube filled with serous or clear fluid).

Diagnosis is usually difficult. Procedures that are used to determine whether the fallopian tubes are blocked, for example: laparoscopy (an operation performed in the abdomen or pelvis through small incisions with the aid of a camera) or hysteroscopy (the inspection of the uterine cavity by endoscopy with access through the cervix).

Treatment of fallopian tube damage has traditionally been treated with fallopian tubal surgery (tuboplasty) with a goal of restoring patency to the tubes and thus possibly normal function. Treatments such as assisted
reproductive technologies are used more often than surgery.

The overall prognosis depends principally on the severity of the damage, hence, assessment of tubal damage plays a major role in predicting occurrence of pregnancy and the likelihood of developing ectopic pregnancy.

**Associated diseases**

- endometriosis
- hydrosalpinx
- fallopian tube blockage

**Complications**

Patients with tubal phimosis are at increased risk for ectopic pregnancy. Ectopic pregnancy occurs in around 1-2% of all pregnancies. Ectopic pregnancy is still the most common cause of first trimester maternal death, accounting for 73% of early pregnancy mortality. The incidence of ectopic pregnancy has increased markedly over the last three decades. This is probably due to multiple factors such as the increased prevalence of pelvic inflammatory disease (PID), use of assisted reproductive technology, and increasing maternal age.

**Risk factors**

- pelvic inflammatory disease (PID)
- genital tuberculosis
- surgery (gynecologic surgery, abdominal surgery)

**Impact on fertility**

In the female reproductive system, the fimbria is a fringe of tissue around the ostium of the Fallopian tube, in the direction of the ovary.

An ovary is not directly connected to its adjacent Fallopian tube. When ovulation is about to occur, the sex hormones activate the fimbriae, causing it to swell with blood and hit the ovary in a gentle, sweeping motion. An oocyte is released from the ovary into the peritoneal cavity and the cilia of the fimbriae sweep the ovum into the Fallopian tube. This leads to tubal pregnancy. Hair-like cilia located on the internal surface of the Fallopian tubes carry the fertilized egg to the uterus. Fallopian cilia are sometimes seen in reduced numbers subsequent to an ectopic pregnancy, leading to a hypothesis that cilia damage in the Fallopian tubes is likely to lead to an ectopic pregnancy. As cilia degenerate the amount of time it takes for the fertilized egg to reach the uterus will increase. The fertilized egg, if it doesn't reach the uterus in time,
will hatch from the non-adhesive zona pellucida and implant itself inside
the fallopian tube, thus causing the pregnancy.

Female infertility caused by tubal phimosis can impede the descents of a
fertilized or unfertilized ovum into the uterus through the Fallopian tubes and
prevents a normal pregnancy and full term birth.

**Tubal factor infertility represents around 20-25% of all the issues of infertility.** The evaluation of the fallopian tube is necessary to determine the
management plan of infertility. A number of diagnostic tests are being used in
clinical practice to assess tubal patency as part of the work-up for subfertility.

**Prevention**

As pelvic inflammatory disease is the major cause of tubal phimosis, steps to
reduce sexually transmitted disease will reduce incidence of tubal phimosis.

**Symptoms**

- abdominal pain
- irregular menstrual cycles
- pain while having sex or passing urine
- infertility

**Therapies**

**Self therapy**

Tubal phimosis responds very well to acupuncture as well as Chinese
herbal medicine. Acupuncture increases reproductive system blood
flow. Acupuncture can be effective without causing further scar unlike
surgical treatment option. However acupuncture only alleviates
symptoms of tubal phimosis.

Alternative methods such as manual physical therapy are also cited for
the ability to open and return function to blocked fallopian tubes in
some women. A study of the use of alternative methods showed that
only a minority of infertile couples utilize such treatments.
**Conventional medicine**

**Pharmacotherapy**

Pharmacotherapy is not used to treat tubal phimosis.

**Surgical therapy**

Treatment of fallopian tube obstruction has traditionally been treated with fallopian tubal surgery (tuboplasty) with a goal of restoring patency to the tubes and thus possibly normal function.

Endoscopy (whether laparoscopy or hysteroscopy) play a central role in the management of tubal disease. Permanent correction of the patient’s problem with frequent chances of pregnancy is a definite advantage of endoscopic surgery. The concept of reconstruction following microsurgical principles coupled with refinement of instrumentation and techniques is would improve the results of hysteroscopic and laparoscopic approaches.

**Assisted reproduction**

With the advent of in vitro fertilisation (IVF) which bypasses the need for tubal function a more successful treatment approach has become available for women who want to conceive. IVF has now become the major treatment for women to achieve a pregnancy.

For older women with any significant degree of distal tubal disease, IVF is generally the first and best option because cycle fecundability after distal tubal surgery is low (1% to 2%), time is limited, and IVF is both more efficient and more effective.

IVF and ART (assisted reproductive technology) generally start with stimulating the ovaries to increase egg production. Most fertility medications are agents that stimulate the development of follicles in the ovary. Examples are gonadotropins and gonadotropin releasing hormone. After stimulation, the physician surgically extracts one or more eggs from the ovary, and unites them with sperm in a laboratory setting, with the intent of producing one or more embryos.
Fertilization takes place outside the body, and the fertilized egg is reinserted into the woman's reproductive tract, in a procedure called embryo transfer. A woman who has already had a live birth is more likely to have a successful ART procedure than a woman who hasn't given birth before.

While IVF therapy has largely replaced tubal surgery in the treatment of infertility, the presence of hydrosalpinx is a detriment to IVF success. It has been recommended that prior to IVF, laparoscopic surgery should be done to either block or remove hydrosalpinges.

**Find more about related issues**

#### Diagnoses

**Fallopian tube blockage**
An obstruction prevents the egg or sperm from traveling down the tube, thus making fertilization impossible.
Learn more at: [www.fertilitypedia.org/therapy/diag/fallopian-tube-blockage](http://www.fertilitypedia.org/therapy/diag/fallopian-tube-blockage)

**Endometriosis**
A state in which pieces of the tissue alike to the lining of the uterus (endometrium) grow in other parts of the body.
Learn more at: [www.fertilitypedia.org/therapy/diag/endometriosis](http://www.fertilitypedia.org/therapy/diag/endometriosis)

**Menopause**
The time in most women's lives when menstrual periods stop permanently, and the woman is no longer able to have children.
Learn more at: [www.fertilitypedia.org/therapy/diag/menopause](http://www.fertilitypedia.org/therapy/diag/menopause)

**Hydrosalpinx**
A hydrosalpinx is an abnormal pouch containing liquid in a fallopian tube.
Learn more at: [www.fertilitypedia.org/therapy/diag/hydrosalpinx](http://www.fertilitypedia.org/therapy/diag/hydrosalpinx)

**Pelvic Inflammatory Disease**
Infection of the upper part of the female reproductive system and a common complication of some sexually transmitted diseases.
Fallopian tubes
Two very fine tubes that transport sperm toward the egg, and allow passage of the fertilized egg back to the uterus for implantation.
Learn more at: www.fertilitypedia.org/edu/organs/fallopian-tubes

Ovary
The ovum-producing organs of the internal female reproductive system
Learn more at: www.fertilitypedia.org/edu/organs/ovary

Reproductive cells
Oocyte
A female germ cell involved in reproduction.
Learn more at: www.fertilitypedia.org/edu/reproductive-cells/oocyte

Reproductive functions
Fertilization
The fusion of an ovum with a sperm to initiate the development of a new individual organism.
Learn more at: www.fertilitypedia.org/edu/reproductive-functions/fertilization

Implantation
The very early stage of pregnancy at which the embryo adheres to the wall of the uterus.
Learn more at: www.fertilitypedia.org/edu/reproductive-functions/implantation

Ovulation
The release of egg(s) from the ovaries.
Learn more at: www.fertilitypedia.org/edu/reproductive-functions/ovulation

Risk factors
Abdominal surgery
Surgical procedures that involve opening the abdomen.
Learn more at: www.fertilitypedia.org/therapy/RF/abdominal-surgery

Ectopic pregnancy
A complication of pregnancy in which the embryo attaches outside the uterus.
Learn more at: www.fertilitypedia.org/therapy/RF/ectopic-pregnancy
Pelvic Inflammatory Disease
Infection of the upper part of the female reproductive system and a common complication of some sexually transmitted diseases.
Learn more at: www.fertilitypedia.org/therapy rf/pelvic-inflammatory-disease

Sexually transmitted diseases
Illnesses that have a significant probability of transmission between humans by means of human sexual behavior and that may impact fertility.
Learn more at: www.fertilitypedia.org/therapy rf/sexually-transmitted-diseases

Symptoms

Infertility
The failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse.
Learn more at: www.fertilitypedia.org/edu/symptoms/infertility

Irregular menstruation
Irregular menstruation is a menstrual disorder whose manifestations include irregular cycle lengths as well as metrorrhagia
Learn more at: www.fertilitypedia.org/edu/symptoms/irregular-menstruation

Lower abdominal pain
Pain that occurs in low area of abdomen, below the umbilicus.
Learn more at: www.fertilitypedia.org/edu/symptoms/lower-abdominal-pain

Painful sexual intercourse
The painful feelings during sexual intercourse.
Learn more at: www.fertilitypedia.org/edu/symptoms/painful-sexual-intercourse

Painful urination
A burning or stinging sensation during urination.
Learn more at: www.fertilitypedia.org/edu/symptoms/painful-urination-1

Therapies
**Acupuncture**
A form of alternative medicine and a key component of traditional Chinese medicine involving thin needles inserted into the body at acupuncture points
Learn more at: [www.fertilitypedia.org/edu/therapies/acupuncture](http://www.fertilitypedia.org/edu/therapies/acupuncture)

**Hysteroscopy**
The inspection of the uterine cavity by endoscopy with access through the cervix.
Learn more at: [www.fertilitypedia.org/edu/therapies/hysteroscopy](http://www.fertilitypedia.org/edu/therapies/hysteroscopy)

**ICSI**
A micromanipulative fertilization technique in which a single sperm is injected directly into an egg.
Learn more at: [www.fertilitypedia.org/edu/therapies/icsi](http://www.fertilitypedia.org/edu/therapies/icsi)

**Microsurgery of blocked tubes**
Treatment option for women whose tubes were blocked by tubal ligation and will be rejoined again.
Learn more at: [www.fertilitypedia.org/edu/therapies/microsurgery-of-blocked-tubes](http://www.fertilitypedia.org/edu/therapies/microsurgery-of-blocked-tubes)

**Standard IVF**
A process in which an egg is fertilised by sperm outside the body: in vitro. Own or donated gametes may be used.
Learn more at: [www.fertilitypedia.org/edu/therapies/standard-ivf](http://www.fertilitypedia.org/edu/therapies/standard-ivf)

**Traditional Chinese medicine**
A broad range of medicine practices sharing common concepts which have been developed in China and are based on a tradition of more than 2000 years.
Learn more at: [www.fertilitypedia.org/edu/therapies/traditional-chinese-medicine](http://www.fertilitypedia.org/edu/therapies/traditional-chinese-medicine)
A situation where the tubal end is partially occluded.
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