TAMIL NADU FEDERATION OF OBSTETRICIANS & GYNAECOLOGISTS

e - Newsletter

Issue 6

On

CERVIX

8th October 2021

TAMIL NADU FEDERATION OF OBSTETRICIANS & GYNAECOLOGISTS

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President's Message

Dear Comrades

Warm greetings from me. Hope this newsletter reaches you and your family in good health.

This newsletter is about the anatomy, physiology and pathology of cx. Cervix is that part of reproductive tract connecting UT and vagina i.e. exterior to the peritoneal cavity and is easily visualized structure. If it's anatomical and physiological functions are defective it results in infertility (cervical factor), incompetent os and malignancy which can be prevented by vaccination and screening. This booklet also deals in detail about various roles of cx by eminent gynaecologists and will be interesting to read.

Enjoy reading and add it to your library

Jai Hind!!!

Dr Anjalakhi Chandrasekar

Founder President, TNFOG

Secretary's Message

Dear Members,

Happy Navratri greetings.

In this season our 'TNFOG marathon CME' encouraging Yuva is receiving wide reception and appreciation. Its success stems from the support it derives from all societies. Thank you all, dear members. This month's CME is focused on 'only cervix'. Why was it chosen? Cervix decides & progresses for normal labour, cervical incompetency can be corrected if identified early. HPV is the main cause of cervical cancer. In this CME we have focused on all cervical problems & finally prevention - screening of cervical cancer which is very important to reduce mortality. Screening tests find abnormal cells so they can be treated before they turn into cancer.

Hope this newsletter covering Obstetrics & Gynaec topics on cervix is useful.

Happy to announce that TNFOG has started PG trainings as 'Bhodana' every month on second & fourth Saturdays starting from this Saraswathi pooja. Please involve all PGs is our request to HODs at medical colleges.

Thanks to all participants.

Vazhga Valamudan

Dr Sampathkumari

Founder Secretary, TNFOG

TAMIL NADU FEDERATION OF OBSTETRICIANS & GYNAECOLOGISTS

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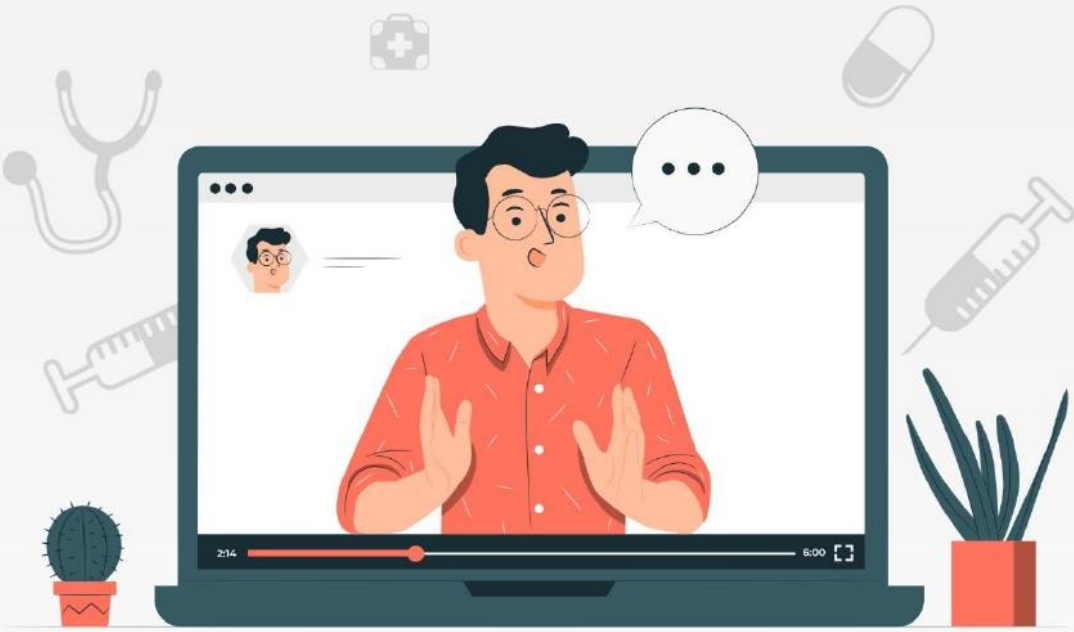
TNFOG Plans to conduct TWO CME Program Every Month

1. Marathon CME 2. Magalir Nalam

MARATHON CME??
THIS POINTS TO TWO THINGS



1. The YUVA OGCIAN Competition

Yes, every month 2nd Friday CME will have a session with 2 YUVA speakers, Consultants less than 35 years.

The session will be judged by the same judges and at the end of the year,
First, Second and Third prize will be awarded to the best speakers at the Annual conference.

All societies gear up and suggest one YUVA speaker of your society.

2. There is a question at the end of every session in the CME. The first Delegate who answers the question will be awarded a prize. This will continue in all the CMEs.

BE READY TO WIN THE PRIZE

TNFOG MARATHON CME ON

CERVIX

Date: 08.10.2021 (Friday) | **Time: 4.30 - 7.30 PM**

Dr. Anjalakshi Chandrasekar
President , TNFOG

Dr. S. Sampath Kumari
Secretary, TNFOG

Dr. Vijayalakshmi Gnanasekaran
Treasurer, TNFOG

Chief Guest

Dr. V. Madhini

Session I

Judges

Dr. Nidhi Sharma

Dr. Vijayalakshmi Kandasamy

Speakers

Dr. B. Manochitra

Dr. Ramya Selvaraj

Session II

Chairpersons

Dr. J. Amala Devi

Dr. E. Chitra

Dr. Senthiru Ramachandran

Speakers

Dr. Nirmala Jayasankar

Dr. Srikala Prasad. T

Dr. Bhagyalaxmi Nayak

Session III

Moderator

Dr. Uma Ram

Panelists

Dr. M. Gomathy

Dr. Archana Ambujan

Dr. R. Thamilkothai

Dr. Shanthadevi Sambath

Dr. Poornima.C

Dr. Selvabharathy Arulkumaran

TNFOG MARATHON CME ON

CERVIX

Date: 08.10.2021 (Friday) | **Time: 4.30 - 7.30 PM**

2 ICOG Credit Points Granted

Scientific Programme

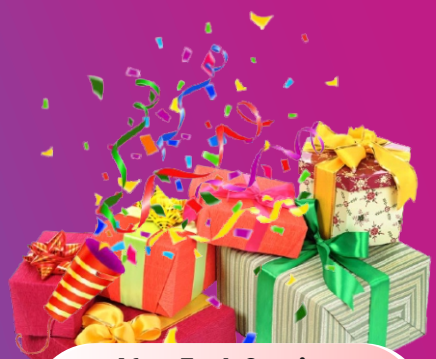
DURATION	TOPIC	SPEAKERS
04.30 - 05.00 PM	**INAUGURATION**	
	Introduction	Dr. S. Sampath Kumari
	Inauguration	Tamil Thai Vazhthu & Kuthu Villaku
	Welcome Address	Dr. Anjalakshi Chandrasekar
	Chief Guest Address	Dr. V. Madhini
	Release of e-Newsletter (Issue 6) on "Cervix"	
SESSION I - YUVA SESSION Chairpersons : Dr. Nidhi Sharma & Dr. Vijayalakshmi Kandasamy		
05.00 - 05.15 PM	Cervix - Anatomy & Bishop Score	Dr. Ramya Selvaraj
05.15 - 05.30 PM	Cervix - Patho & CIN	Dr. B. Manochithra
	Q & A	
SESSION II - VIDEO SESSION Chairpersons: Dr. J. Amala Devi, Dr. E. Chitra & Dr. Senthiru Ramachandran		
05.35 - 05.50 PM	Cervical Stitch	Dr. Nirmala Jayasankar
05.50 - 06.05 PM	Fothergills	Dr. Srikala Prasad . T
06.05 - 06.20 PM	Conisation	Dr. Bhagyalaxmi Nayak
	Q & A	
SESSION III - PANEL DISCUSSION Moderator: Dr.Uma Ram		
06.25 - 07.25 PM	Case scenarios on cervical problems	**Panelists** Dr. M. Gomathy Dr. Archana Ambujan Dr. R. Thamilkothai Dr. Shanthadevi Sambath Dr. Poornima.C Dr. Selvabharathy Arulkumaran
	Q & A	
07.30 PM	Vote of Thanks	Dr. Saravana kumar
Coordinator - Dr. S. Rajasri		

Coordinator

Dr. S. Rajasri

Vote of Thanks

Dr. Saravana kumar



After Each Session, Answer the 'Question' FIRST & GET EXCITING PRIZE!

For All Registrants, Certificate will be Provided

Click to Join!

zoom LIVE

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8. Cancer Cervix – **Dr. Mahalakshmi**

Let us unite in our war against Cancer Cervix

Dr. Ramani Rajendran

Cervical cancer is the fourth most common cancer in women. Almost all cervical cancer cases (99%) are linked to infection with high-risk human papillomaviruses (HPV). This is the only gynae malignancy that is 100%preventable and curable when detected early and treated effectively

In August 2020 the World Health organisation has devised the elimination process by setting goal for all countries to scale down the incidence rate of below 4 per 100 000 women by 2030 for which each country should meet the 90-70-90 targets meaning

Vaccinating 90% of girls with the HPV vaccine by the age of 15

Screening 70% of women screened using a high-performance test by the age of 35, and again by the age of 45

Treating 90% of women with pre-cancer treated and 90% of women with invasive cancer managed.

Primary prevention in the form of vaccination is joint responsibility of both paediatrician and gynaecologist, whereas secondary prevention is sole commitment of an obgyn.

Secondary prevention: screening and treating precancerous lesions. The principal goal of secondary prevention is to reduce cervical cancer incidence and mortality by identifying and treating women with precancerous lesions.

Cytology-based screening has been successfully used to achieve these goals when implemented as part of national programmes with high coverage and in settings where resources exist for patient follow-up, additional diagnostic tests (colposcopy and pathology) and disease management. In low- and middle-income countries cytology-based programmes have been difficult to implement, and where they have been implemented screening coverage is low

Visual inspection of the cervix with acetic acid followed by treatment (screen and treat) is an alternative approach to secondary prevention in resource-constrained settings. Although relatively easy to establish, the quality of such visual inspection depends heavily on the provider and its sensitivity is variable.

Testing for HPV offers superior specificity, and its strong negative predictive value means that women who test negative only need to be retested after a minimum interval of five years. Providing women with the option of self-sampling contributes to acceptability and access to services

Ideally switching over to HPV testing as the primary method of screening for cervical cancer is the need of the hour and it is also the current recommendation by the WHO. Evidenced-based strategies for the evaluation and management of women who test HPV-positive are available.

Cervical cancer screening will require a matching increase in capacity for treatment of the detected lesions, as screening women without access to

treatment is pointless. WHO's treatment guidelines were recently expanded to include thermal ablation as a therapeutic modality for women who have eligible precancerous lesions. This simple handheld thermal ablator devices that has the advantage of the short treatment time, lesser learning curve and the convenience of covering a large lesion with multiple overlapping applications offers a great scope towards elimination of cervical cancer

Cervix – Bishop Score

Dr. S Sampath Kumari

The cervix or cervix uteri (Latin, 'neck of the uterus') is the lower part of the uterus (womb) in the human female reproductive system. The cervix is usually 2 to 3 cm long (~1 inch) and roughly cylindrical in shape, which changes during pregnancy. The narrow, central cervical canal runs along its entire length, connecting the uterine cavity and the lumen of the vagina. The opening into the uterus is called the internal os, and the opening into the vagina is called the external os. The lower part of the cervix, known as the vaginal portion of the cervix (or ectocervix), bulges into the top of the vagina. As a component of the female reproductive system, the cervix is derived from the two paramesonephric ducts (also called Müllerian ducts), which develop around the sixth week of embryogenesis. During development, the outer parts of the two ducts fuse, forming a single urogenital canal that will become the vagina, cervix and uterus

The cervical canal is a passage through which sperm must travel to fertilize an egg cell after sexual intercourse. Several methods of contraception, including cervical caps and cervical diaphragms, aim to block or prevent the passage of sperm through the cervical canal.

Cervical mucus is used in several methods of fertility awareness, such as the Creighton model and Billings method, due to its changes in consistency throughout the menstrual period. During vaginal childbirth, the cervix must flatten and dilate to allow the fetus to progress along the birth canal.

The cervix plays a major role in childbirth. As labour progresses, the cervix becomes softer and shorter, begins to dilate, and withdraws to face the anterior of the body.The support the cervix provides to the fetal head starts to give way when the uterus begins its contractions. During childbirth, the cervix must dilate to a diameter of more than 10 cm (3.9 in) to accommodate the head of the fetus as it descends from the uterus to the vagina. In becoming wider, the cervix also becomes shorter, a phenomenon known as effacement

The time taken for the cervix to dilate and efface is one factor used in reporting systems such as the Bishop score, used to recommend whether interventions such as a forceps delivery, induction, or Caesarean section should be used in childbirth.

The total score is calculated by assessing the following five components on manual vaginal examination The scoring system utilizes cervical dilation, position, effacement, consistency of the cervix, and fetal station. Cervical dilation, effacement, and station are scored 0 to 3 points, while cervical position and consistency are scored 0 to 2 points.

Bishop score of 8 or greater is considered to be favorable for induction, or the chance of a vaginal delivery with induction is similar to spontaneous labor. A score of 6 or less is considered to be unfavorable if an induction is indicated cervical ripening agents may be utilized.The most common modification to the Bishop score

is a simplified scoring system that just takes into account dilation, effacement, and station (each scored 0 to 3 points). In this shortened modification, a score of more than 5 is considered favorable.

Two main types of cervical ripening are medical (prostaglandin/Oxytocin) use and mechanical (balloon) methods.

BISHOP SCORE

Score	Dilation (cm)	Position of cervix	Effacement (%)	Station (-3 to +3)	Cervical Consistency
0	Closed	Posterior	0-30	-3	Firm
1	1-2	Mid position	40-50	-2	Medium
2	3-4	Anterior	60-70	-1, 0	Soft
3	5-6	--	80	+1, +2	--

MODIFIED BISHOP SCORE

BISHOP SCORE =…….. (total)			Date of Bishop Score: ……/…../…..	
Score	0	1	2	3
Dilation	Closed	1 - 2	3 - 4	5
Length	> 4	3 - 4	1 – 2	0
Consistency	Firm	Medium	Soft	—
Position	Posterior	Midline	Anterior	—
Head: station	-3	-2	-1, 0	+1,+2

Total Score -13 Favourable Score 6-13 Unfavourable Score 0-5

A score of 5 or less suggests that labour is unlikely to start without induction.

Use of PGE2 – Dinopristone Intracervical 0.5 mg gel.

A score of 9 or more indicates that labour will most likely commence spontaneously.

Modified Bishop score

According to the Modified Bishop's pre-induction cervical scoring system, effacement has been replaced by cervical length in cm, with scores as follows- 0>3cm, 1>2cm, 2>1cm, 3>0cm

Cervical Cerclage – Current Trends

Dr. Divya Ranjith

Cervical cerclage is performed as an attempt to prolong pregnancy in certain women who are at higher risk of preterm delivery.

Cervical cerclage was first performed in 1902 in women with a history of mid trimester abortion or spontaneous preterm birth suggestive of cervical incompetence with the aim of preventing recurrent loss. Cervical incompetence is an imprecise clinical diagnosis frequently applied to women with such a history where it is assumed that the cervix is weak and unable to remain closed during the pregnancy.

Cerclage may provide a degree of structural support to a weak cervix, its role in maintaining the cervical length and the endocervical mucus plug as a mechanical barrier to ascending infection may be more important.

The pathophysiology of cervical insufficiency is still poorly understood. Factors that may increase the risk of cervical insufficiency include surgical trauma to the cervix from conisation, loop electrosurgical excision procedures, mechanical dilation of the cervix during pregnancy termination, or obstetric lacerations.

Other proposed etiologies have included congenital mullerian anomalies, deficiencies in cervical collagen and elastin, and in utero exposure to diethylstilboestrol. However these factors are not associated specifically with cervical insufficiency and are not indications for the use of cervical cerclage.

Indications:

In which patients is cerclage indicated based on obstetric history or physical examination findings? (see Box1).

The safety and efficacy of cerclage in the treatment of patients with cervical insufficiency after fetal viability have not been adequately assessed. Cerclage should be limited to pregnancies in the second trimester before fetal viability has been achieved.

Box 1. Indications for cervical cerclage in women with singleton pregnancies

History:

- History of one or more second trimester pregnancy losses related to painless cervical dilatation and in the absence of labor or abruption placentae.
- Prior cerclage due to painless cervical dilatation in the second trimester.

Physical examination:

- Painless cervical dilatation in the second trimester.

Ultrasonographic findings with a history of prior preterm birth:

Current singleton pregnancy prior spontaneous preterm birth at less than 34 weeks of gestation and short cervical length (less than 25mm) before 24 weeks of gestation.

History Indicated cerclage:

Patient selection for history indicated cerclage (also known as prophylactic cerclage) is based on classic historic features of cervical insufficiency (see box 1)

History indicated cerclage can be considered in a patient with a history of unexplained second trimester delivery in the absence of labor or abruption placentae. History indicated cerclage typically are placed at approximately 13- 14 weeks of gestation.

Physical examination – Indicated cerclage:

Women who present with advanced cervical dilatation in the absence of labor and abruption placentae have historically been candidates for examination indicated cerclage (known as emergency or rescue cerclage). Thus after clinical examination to rule out uterine activity or intra amniotic infection or both, physical examination, indicated cerclage placement in patients with singleton gestations who have cervical change of the internal OS may be beneficial.

Ultrasound indicated cerclage

Ultrasound – indicated cerclage often is recommended for women who have changes on Trans vaginal ultrasound examination that are consistent with a short cervical length with or without the presence of funnelling. These women usually undergo anultrasound examination because they have risk factor for early delivery. Although patients usually are asymptomatic, some may report nonspecific symptoms such as back ache, uterine contractions, vaginal spotting, pelvic pressure or mucoid vaginal discharge.

Meta analyses of multiple randomized trials that compared cerclage versus no cerclage in patients with short cervical length during the second trimester have reached the following conclusion (1,2)

Although women with a current singleton pregnancy, prior spontaneous preterm birth at less than 34 weeks of gestation, and short cervical length (less than 25mm) before 24 weeks of gestation do not meet the diagnostic criteria for cervical insufficiency, available evidence suggests that cerclage placement may be effective in this setting.

Cerclage placement in women without a history of prior spontaneous preterm birth and with a cervical length less than 25mm detected between 16 weeks and 24 weeks of gestation has not been associated with a significant reduction in preterm birth (3).

Rescue Cerclage:

Insertion of cerclage as a salvage measure in the case of premature cervical dilatation with exposed fetal membranes in the vagina. This may be discovered by ultrasound examination of the cervix or as a result of a speculum / physical examination performed for symptoms such as vaginal discharge, bleeding or sensation of pressure.

Which patients should not be considered candidates for cerclage?

Incidentally detected short cervical length in the second trimester in the absence of a prior singleton preterm birth is not diagnostic of cervical insufficiency, and cerclage is not indicated in this setting.

Cerclage may increase the risk of preterm birth in women with a twin pregnancy and an ultrasonographically detected cervical length less than 25 mm and is not recommended (13,14). In addition, evidence is lacking for the benefit of cerclage

solely for the following indications: prior loop electrosurgical excision procedure, cone biopsy, or müllerian anomaly.

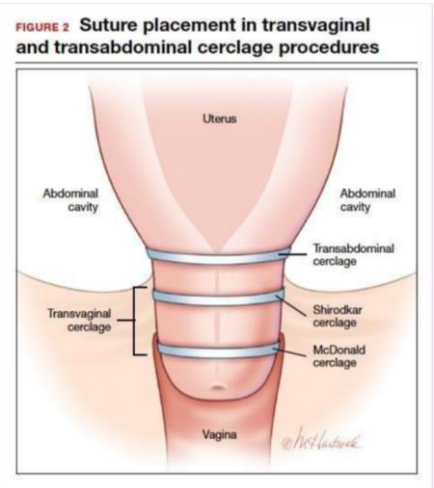
Treatment Options:

Historically several nonsurgical and surgical modalities have been proposed to treat cervical insufficiency.

Certain non-surgical approaches, including activity restriction, bed rest, and pelvic rest have not been proved to be effective for the treatment of cervical in sufficiency and their use is discouraged (4,5)

Another non surgical treatment to be considered in patients at risk of cervical insufficiency is the vaginal pessary. Evidence is limited for potential benefit of pessary placement in selected high risk patients (6,7,8)

Surgical approach



Transvaginal Cerclage(MC Donald)

A transvaginal purse- string non absorbable suture placed at the cervico vaginal junction, without bladder mobilisation, taking caution to avoid the paracervical

vessels. The suture is then tied down with a surgeon knot, either anterior or posterior.

High transvaginal cerclage (shirodkar)

In this technique once the vesico cervical reflection has been identified, the mucosa of the anterior cervix is incised at this junction, similar to vaginal hysterectomy. An allis clamp can be used to elevate the bladder flap while the bladder is than mobilized cephalad using blunt or sharp dissection. This is continued until reaching the level of the internal OS. A similar incision is then made in the posterior cervical mucosa. Again, an Allis clamp can be used for traction on the posterior mucosa, while the reflection of the Pouch of Douglas is created using blunt dissection. An Allis clamp can then be applied at the 9 o'clock position to retract and isolate the paracervical vessels. A nonabsorbable suture can then be passed from anterior to posterior just beneath the Allis clamp so as not to enter the cervical os. The Allis should then be removed and placed in a similar fashion at the 3 o'clock position. The suture can then be passed from posterior to anterior, with special attention to lay the suture flat against the posterior aspect of the cervix. The suture can then be securely tied anteriorly. The anterior and posterior mucosa can then each be reapproximated in order to bury the cerclage stitch. This may be done in the running orinterrupted fashion using an absorbable suture. The free ends of the cerclage stitch may be left exposed to facilitate subsequent removal.

Trans abdominal Cerclage:

In women with a previous failed transvaginal cerclage, insertion of a transabdominal cerclage may be considered. Transabdominal cerclage may be performed pre-conceptually or in early pregnancy.

This cerclage performed via a laparotomy or laparoscopy, placing the suture at the cervico isthmic junction. It is done prior or during pregnancy, mostly between 12 to 16 weeks.

The primary indication will be the failed vaginal cerclage in previous pregnancy also where the vaginal approach is not feasible due to shortening or abnormal anatomy of cervix

Classic laparotomy approach is an invasive procedure and the way of birth mostly c- section. With the aim to avoid this two laparotomies, a laparoscopic approach for cerclage placement could be an interesting choice.

In laparoscopic cerclage a 5mm Mersilene tape with straight needle is introduced by suprapubic trocar into abdominal cavity. Before a complete identification of uterine vessels at both sides and using atraumatic graspers, the needle is grasped on the proximal portion in a 90 degrees angle. Posteriorly and helped by a cranial and posterior uterine mobilization, the needle passes through the right broad ligament in the avascular space created on the anterior leaf, medially from the uterine artery until the tip of needle is seen in the posterior face above the uterosacral ligament. All the steps are possible by synchronic uterine mobilization. The procedure is then repeated contra-laterally following the same anatomical and technical precepts, but from posteriorly to anteriorly. Once the position of the mesh is complete and checked, far away from ureter and medial to uterine arteries, the tape is knotted seven times anteriorly at the cervicoithsmic junction and Caprofyl 2-0 stitch is made to fix the knot and left it horizontally. Finally, the procedure is ended with the anterior peritonization, covering all the plica uterovesicalis and the mesh, leaving completely extra peritoneal.

Despite the arduous technique required in this approach some interesting intrinsic advantages as a lack of foreign body inside the vagina, absent of mesh

slippage (reducing potential migration due the proximal placement) and high placement of the suture are also found.

Moreover laparoscopic it has less membranes rupture and chorioamnionitis rates.

Regardless the surgical method selected the laparoscopic cervical cerclage placed prior pregnancy is a real, feasible and non-inferior choice when compared to a vaginal or laparotomy approach.

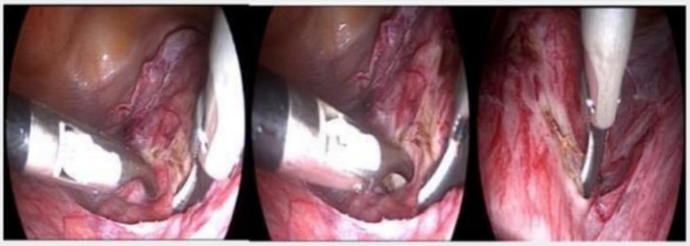


Figure 2: Creation of an avascular space in the anterior leaf of broad ligament, bilaterally.

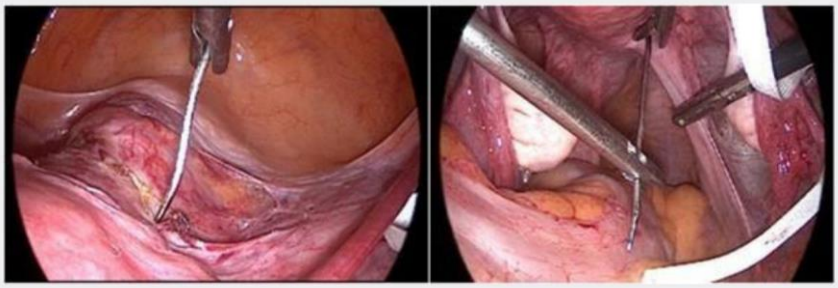


Figure 3: Passing the needle attached to Mersilene Tape from anterior to posterior, medially to uterine vessels and above cardinal ligament.

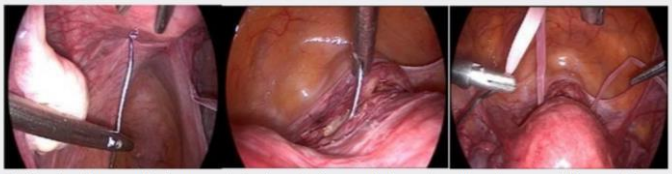


Figure 4: Passing the needle from posterior to anterior, medially and up the uterosacral ligament insertion, leaving both free arms of the mesh anteriorly.

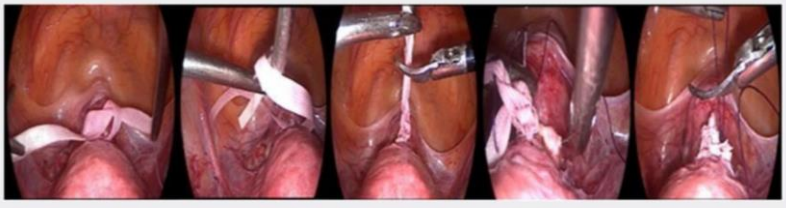


Figure 5: Knotting the mesh and placing a secure knot of Caprofil 2-0 attached to cervical tissue.

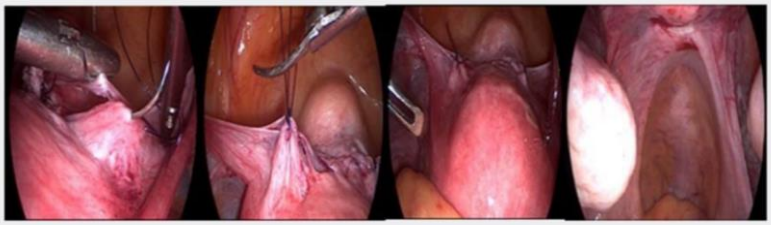


Figure 6: Peritonization and final result of procedure.

Contraindications to cerclage insertion:

- Active preterm labour
- Clinical evidence of chorioamnionitis
- Continuing vaginal bleeding
- PPROM
- Evidence of fetal compromise
- Lethal fetal defect
- Fetal death

Information given to woman before circlage:

- Cerclage insertion is associated with a doubling in risk of maternal pyrexia but no apparent increase in chorioamnionitis.
- Cerclage insertion is not associated with an increased risk of PPROM, induction of labour or caesarean section
- The insertion of a cervical suture is not associated with an increased risk of preterm delivery or second trimester loss.
- There is a small risk of intraoperative bladder damage, cervical trauma, membrane rupture and bleeding during insertion of cervical circlage.
- Shirodkar cerclage usually requires anaesthesia for removal and therefore carries the risk of an additional anaesthetic.
- Cervical cerclage may be associated with a risk of cervical laceration / trauma if there is spontaneous labour with the suture in place.

Pre-operative management

Investigations before insertion of cerclage

- It is good practice to offer a first trimester ultrasound scan and screening for aneuploidy before the insertion of a history indicated suture to ensure both viability and the absence of lethal / major fetal abnormality.
- There is insufficient evidence to recommend routine amniocentesis before rescue or ultrasound indicated cerclage as there are no clear data demonstrating that it improves outcomes.
- In the presence of positive culture from a genital swab a complete course of sensitive antimicrobial eradication therapy before cerclage insertion would be recommended.
- Delayed circlage can only increase the risk of infection, immediate insertion is likely to supersede the benefits of waiting to see if infection, manifests clinically.

Operative issues:

- There is no evidence to support the use of routine perioperative tocolysis in women undergoing insertion of cerclage
- Antibiotic prophylaxis at the time of cerclage placement should be at the discretion of the operating team
- Elective transvaginal cerclage can safely be performed as a day-care procedure

Women undergoing ultrasound indicated or rescue cerclage may benefit from at least 24 hours post-operative period of observation in hospital.

In women undergoing insertion of trans- abdominal cerlage via laparotomy an inpatient stay of at least 48 hours is recommended.

Adjuvant management:

Bed rest: Bed rest in women who have undergone cerclage should not be routinely recommended. But the decision should be individualised.

Sexual intercourse: Abstinence from sexual intercourse following cerclage insertion should not be routinely recommended.

Role for post cerclage serial sonographic surveillance of cervical length: Routine serial sonographic measurement of the cervix is not recommended, it may be useful in individual cases following ultrasound -indicated cerclage to offer timely administration of steroids or in utero transfer.

Role of repeat cerclage when cervical shortening is seen post cerclage: The decision to place a rescue cerclage following an elective or ultrasound indicated cerclage should be made on an individual basis taking in to account the clinical circumstances.

Should women receive supplemental progesterone following cerclage: Routine use of progesterone supplementation following cerclage is not recommended?

When should the cerclage be removed of:

A transvaginal cerelage should be removed before labour, usually between 36+1 and 37+6 weeks of gestation. Unless delivery is by elective caesarean section, in which case suture removal could be delayed until this time.

In women presenting in established preterm labour, the cerelage should be removed to minimise potential trauma to the cervix

There are no studies regarding the use of anaesthesia in the use of shirodkars suture but given that the technique involves burial of the suture an anaesthetic is likely to be necessary for removal.

All women with a trans abdominal cerclage require delivery by caesarean section and the abdominal suture may be left in place following delivery if further pregnancies are contemplated.

Should the cerclage be removed following PPROM

In women with PPROM between 24 and 34 weeks of gestation and without evidence of infection or preterm labour, delayed removal of the cerclage for 48 hours can be considered as it may result in sufficient latency that a course of prophylactic steroids for fetal lung maturation is completed and or in utero transfer arranged.

Complications with cerclage

Overall there is a low risk of complications with cerclage placement. Reported complication include rupture of membrane, chorioamnionitis, cervical lacerations and suture displacements. Life threatening complications of uterine rupture and maternal septicaemia are extremely rare but have been reported with all types of cerclage (9,10) Compared with transvaginal cerclage, trans abdominal cerclage carries a much greater risk of haemorrhage which can be life threatening in addition to all the other complications associated with abdominal surgery (11,12)

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Cervical Pregnancy

Dr Lalitha

Introduction:

Cervical ectopic pregnancies (CEP) are rare, with an incidence of less than 1% of all ectopic gestations. They result from the passage of a blastocyst through the uterine cavity and subsequent implantation and growth within the mucosa of the endocervical canal below the level of the internal os. They have an estimated incidence of one in 2500 to one in 18,000 pregnancies. This condition was first described in 1817 and was given its name in 1860. The first report of a cervical ectopic pregnancy diagnosed by ultrasound was in 1978.

Etiology:

The etiology of cervical pregnancy is unknown, although it is likely to result from a combination of factors including local cervical pathology. Predisposing factors include previous instrumentation of the endocervical canal like D&C, anatomic anomalies (myomas, synechiae), intra- uterine device (IUD) use, in vitro fertilisation (IVF), diethylstilbestrol exposure, and increase of maternal age and parity although none of them are strongly implicated or associated with CEP.

Clinical presentation:

The patients may present with painless vaginal bleeding after a period of amenorrhoea but may be associated with abdominal pain and urinary problems. There are five clinical criteria that were proposed by Palman and McElin in order to diagnose CP(1).

1. Uterine bleeding after amenorrhoea and without cramping pain
2. A softened and disproportionately enlarged cervix equal to or larger than the corpus of the uterus- hour glass shape of the uterus
3. The products of conception are totally confined and attached to the endocervix
4. The internal cervical os is closed
5. The external os is partially opened

Differential diagnosis:

CEP is sometimes mistaken as threatened abortion if the patient's presenting symptom is mild to moderate vaginal bleeding. Only heavy vaginal bleeding arouses clinical suspicion of CEP. The other differential diagnoses include a low implantation cervico isthmic pregnancy and more commonly a caesarean scar ectopic pregnancy.

Ultrasound Diagnosis:

Transvaginal sonographic (TVS) findings include an empty uterus with a smooth endometrial stripe, enlarged barrel-shaped cervix, the presence of the gestational sac with/without a viable fetus below the level of the internal os, peritrophoblastic blood flow around the gestational sac as seen by Color Doppler(high velocity and

low impedance) and absence of the “sliding sign”(movement of the s ac and change in position on applying gentle pressure by the transvaginal ultrasound probe). The sliding sign helps in differentiating between CEP and inevitable miscarriage.

Ultrasound criteria for Cervical pregnancy	
Anatomical structure	**Sonographic appearance**
Uterus	Empty
Cervix	Barrel shaped
Gestational sac	Below uterine arteries
Sliding sign	Absent
Doppler blood flow	Around the sac

Management

There are no large studies or protocols to specifically address the management of cervical pregnancies. There is a multitude of treatment options which can be used as an individual modality or as combination therapy, ranging from expectant, conservative, medical and surgical. The management decision depends mainly upon the patient presentation at time of diagnosis. Other contributory factors include obstetrician experience, availability of resources and timing of diagnosis.(2,3,4)

Expectant Management:

The criteria for expectant management would be very early stable cases with serum HCG levels<1000 mIU/ml. They are followed up with transvaginal

ultrasound till complete resolution in the hope of spontaneous resorption and fall in titres.

Conservative Management:

As with tubal ectopic pregnancies, early, accurate diagnosis is the key factor in conservative management of cervical pregnancies. Gestational age < 12 weeks, absence of fetal cardiac activity and lower serum hCG levels are associated with more successful conservative management. Conservative management options would include application of ultrasound guided aspiration and/or injection of medications, high intensity focused ultrasound (HIFU), Laser photocoagulation followed by suction, hysteroscopy or laparoscopy.

Hence we could group conservative management into 3 categories: medical, compression/tamponade and surgical.

1. **Medical management**

   Medical management is indicated in hemodynamically stable cases and in early gestation either as a single modality or as part of combination therapy. It includes both systemic and local therapy. Methotrexate(MTX) is the most widely used systemic chemotherapy in the treatment of cervical ectopic pregnancy.(5) It has long been considered to be an acceptable conservative treatment for tubal ectopic pregnancy in single and multiple dose protocols and the efficacy of its use in cervical ectopic pregnancy has been examined by Kung et al. (1999). This meta-analysis of 62 cases of cervical ectopic pregnancy estimated the efficacy of systemic methotrexate administration in the treatment of cervical ectopic pregnancy to be approximately 91%.

Gestational age > 9 weeks, hCG levels > 10,000 mIU/ml, crown-rump length >10 mm, and fetal cardiac activity have been shown to be associated with a higher risk of primary failure of treatment of cervical ectopic pregnancy with systemic methotrexate and again combination therapy with intra-amniotic injection seemed to increase the chance of successful treatment in this meta-analysis.

Systemic use of MTX involves its intramuscular administration using either a single- or multi-dose protocol. The single-dose protocol involves the use of intramuscular MTX with serum beta hCG levels measured on days 1, 4 and 7 and the multi-dose protocol is by 1 mg/kg intramuscular MTX administered on days 1, 3, 5 and 7; and 0.1mg/kg leucovorin on days 2, 4, 6 and 8. Serum beta hCG levels were assessed on days 1, 3, 5 and 7, day 1 being the first day of MTX injection. If the serum beta hCG declined more than 15% from the previous measurement, no further doses were administered. In resolution.

USG guided local injection:

Several medications have been studied for intrasac instillation, having embryocidal effect or producing local vasoconstriction. They include methotrexate, potassium chloride, absolute ethanol, prostaglandin, hyperosmolar glucose and/or vasopressin. Potassium chloride and methotrexate have been in use with good success rates and low systemic effects . They have been tried in isolation or along with other modalities. This technique has also been used in a number of cases of heterotopic pregnancy with coexistent intrauterine and cervical ectopic pregnancies. There have been reports of cervical pregnancies being successfully treated

and the intrauterine pregnancies preserved with subsequent delivery of viable infants in a few heterotopic pregnancies.

2. **Tamponade:** This approach aims at producing local compression at the ectopic site that may help in the haemostasis. It is usually used in combination with other procedures. Compression with Foley's catheter or Double balloon cervical ripening silicon catheter (cervical sandwich) have been used successfully for cervical tamponade.

3. **Conservative surgery:**

   This encompasses multiple procedures. Evacuation with or without cervical cerclage, hysteroscopic resection, techniques to minimise bleeding like Uterine artery embolization, transvaginal ligation of the uterine arteries, laparoscopic bilateral internal iliac artery ligation or transabdominal uterine artery ligation have been studied. Many of the surgical approaches to treatment will involve a combination of evacuation of CEP and one or two techniques at minimisation of bleeding. A recent review described the use cervical infiltration with vasopressin followed by the placement of an untied cervical suture high around the cervix using a McDonald cerclage technique. This is placed as a precaution to occlude the descending cervical branches of the uterine arteries from bleeding during the procedure. Following suction curettage, a balloon is placed over the cervix for tamponade with successful outcomes with no intraoperative or postoperative bleeding. (6,7)

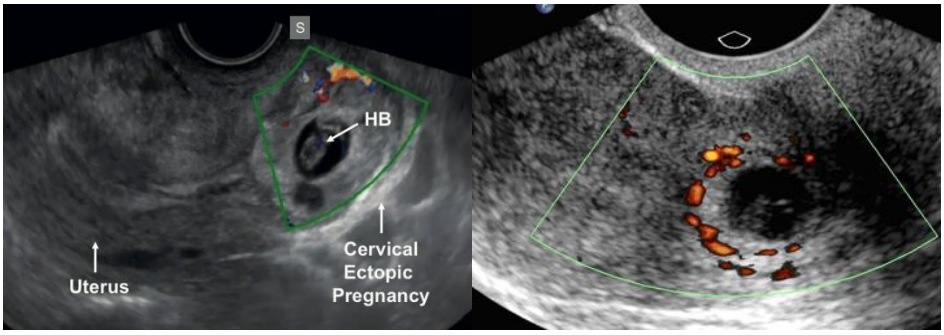
Radical Surgery:

Hysterectomy is indicated in hemodynamically unstable patients with torrential haemorrhage or in few cases of failed medical or combination therapy. This could

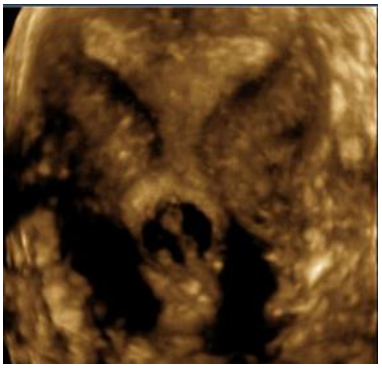
be performed either through transabdominal or transvaginal routes taking into account the technical and time constraints.

Conclusion:

Early diagnosis and treating patients with conservative methods results in decreased morbidity and mortality associated with cervical pregnancy, and, very importantly, preserves the uterus and subsequent fertility. Although many different methods have been advocated, the optimal approach to the treatment of cervical ectopic pregnancy is largely unknown. (8) There is a lack of large scale studies but published reports prove the efficacy of combined conservative management of cervical ectopic pregnancies.



Cervical ectopic pregnancy with peritrophoblastic flow and empty uterine cavity



3D image of a cervical pregnancy

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Manchester repair ('Fothergill's operation')

Dr Srikala Prasad

Professor Donald, first described in 1908 the Manchester repair. This was subsequently modified by Professor Fothergill also from Manchester. This is a useful procedure in patients who are interested in uterus preserving surgeries. They believe that uterine preservation helps not only in retaining their menstrual function and fertility but also helps in their feminine identity. A shorter hospital stay and possibly less morbid surgery is an added attraction.

Indications

1. Elongation of the cervix.
2. Pelvic Organ Prolapse (POP) especially Stage 2 and 3 and desire to retain their menstrual and reproductive function
3. Safer option for patients who are mesh averse.

Contraindications

1. Abnormal or post menopausal bleeding
2. Endometrial pathology
3. Cervical dysplasia
4. Tamoxifen therapy

5. Familial cancers
6. Inability to have routine check-ups

Case selection needs to be done properly. Patients with supravaginal elongation or POP Stage 2 0r 3 are best suited. Patients must be explained the nature of the procedure, the risks involved and the complications associated and detailed consent obtained. They need to be counselled that this procedure is most suited for women who have completed their family as robust data regarding the outcome of pregnancy after the surgery, whether they require any encerclage during pregnancy, guidance whether elective LSCS is better or the chances of recurrences after vaginal delivery are not available. Preoperative evaluation in the routine way with special emphasis on USG Scan and evaluation of the endometrium by Pipelle (endometrial curettage can be avoided during the procedure) and cervical cytology is to be done.

The steps of this procedure are as follows. Patient positioning, anaesthesia and pre-operative antibiotics are similar to vaginal hysterectomy.

A. Dilatation & Curettage

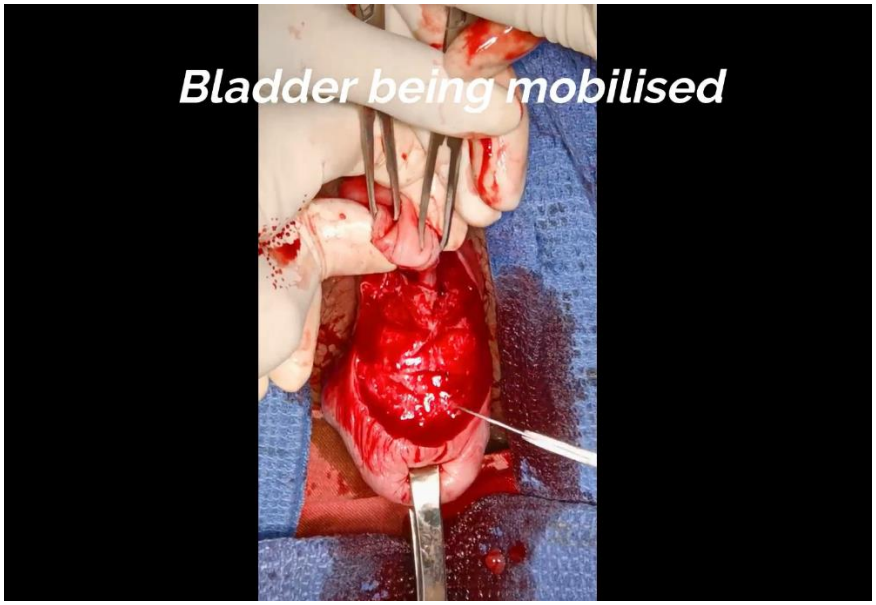
Preliminary sounding the uterus helps us assess the utero cervical length, the length of the cervix, the supravaginal elongation of the cervix. Dilatation of the cervix using a Hegar dilator (up to No.8) facilitates the lip formation of the new cervix. It also helps proper drainage of menstrual blood and prevents stenosis of newly formed external os. Curettage helps us get a sample of the endometrium for histopathologic evaluation.

B. Selection of 4 Fothergill points

The first point is 3 cm below the urethral meatus. The second point is behind the cervix at the junction of the cervix and the isthmus at around 2.5 cms from the

external os. The third and fourth points are on the lateral vagina roughly in line with the second point.

C. Bladder mobilisation



A circular incision is made over the anterior vaginal wall at the level of the bladder crease and the bladder is mobilised by cutting the pubocervical ligament almost till the Utero Vesical fold of peritoneum is reached (but it is not opened).

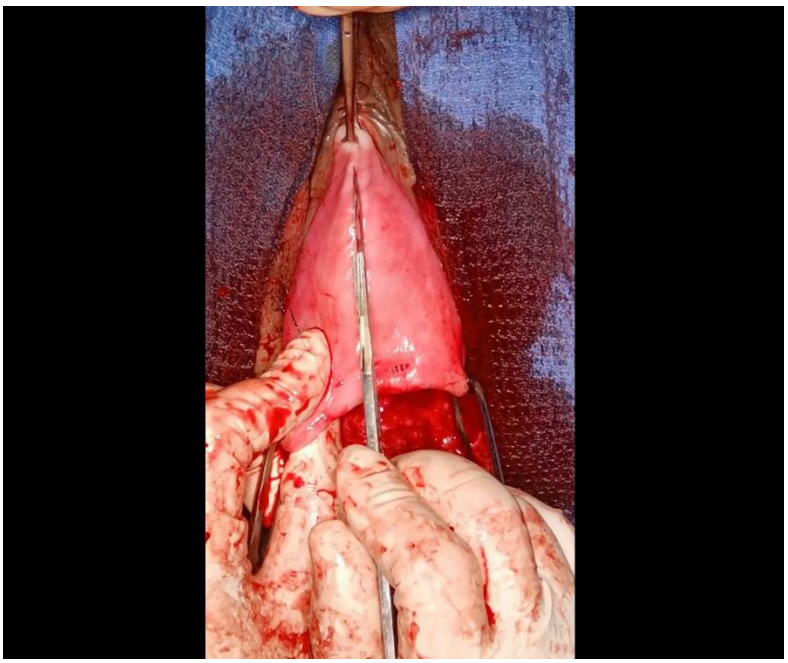
D. Reflecting the posterior vaginal wall

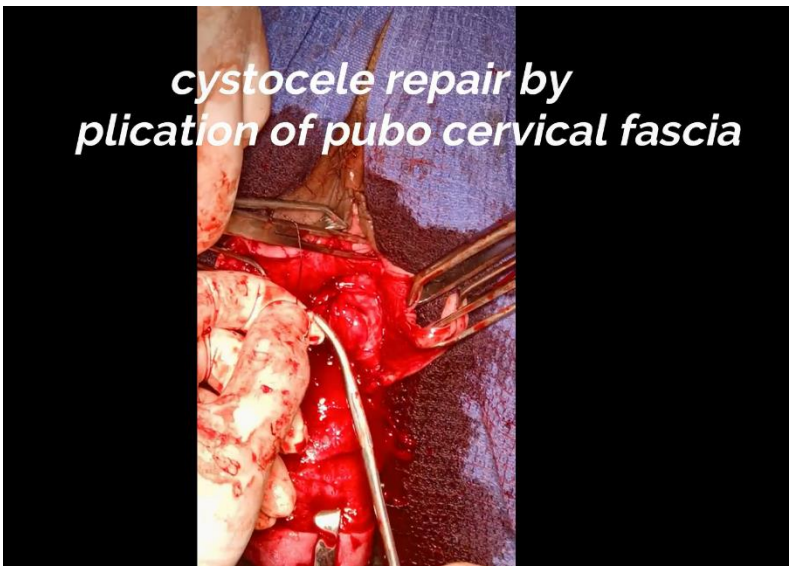
The incision is extended posteriorly and the posterior vaginal wall is reflected. The pouch of Douglas is opened if there is an associated enterocele.

E. Cardinal ligament and the descending branch of the uterine artery is clamped, cut and ligated with a delayed absorbable suture and a suture is left long and held with a hemostat. This procedure is done on both sides.

F. The enterocele sac is opened and it is duly repaired and the 2 uterosacral ligaments are approximated in the midline by 2-3 delayed absorbable sutures.

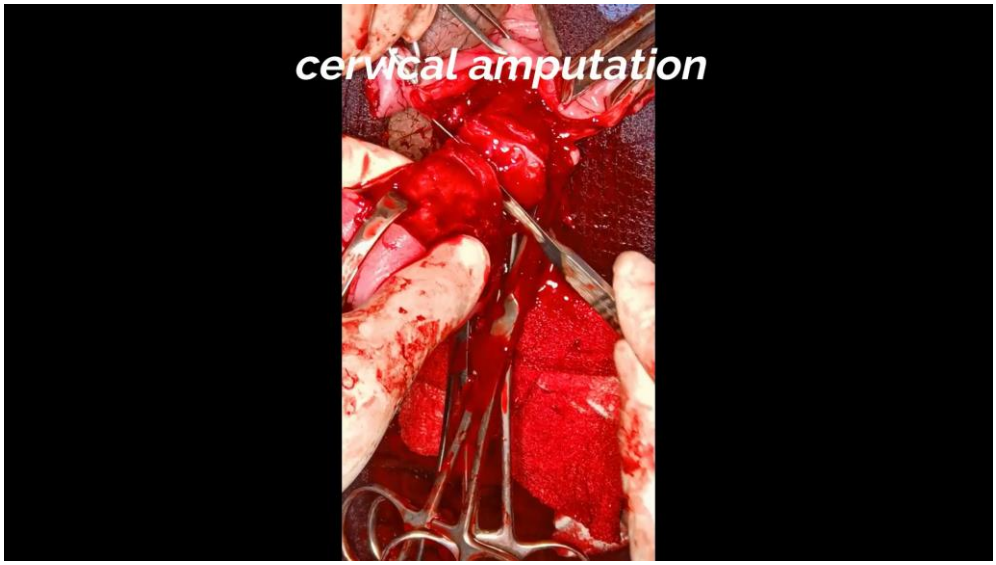
G. Cystocele repair



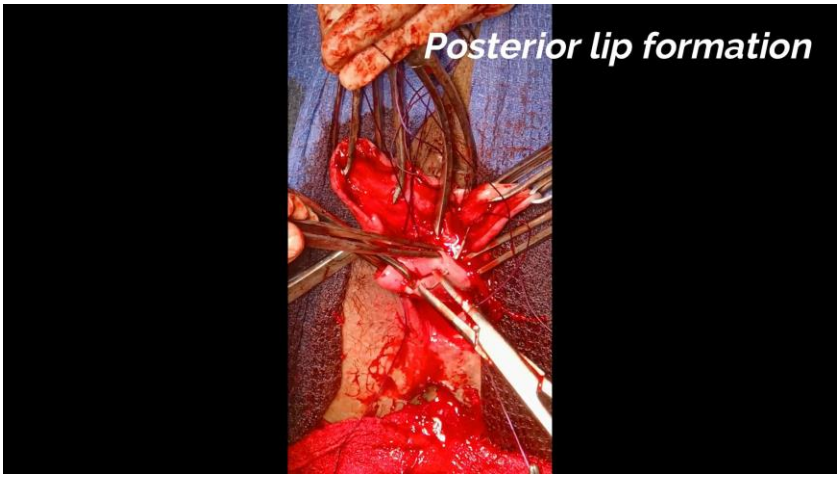


The anterior vaginal wall is reflected by a midline vertical incision after hydro-dissection. Cystocele repair is done by plication of pubocervical fascia. The most proximal plicating suture in cystocele correction is continued with a bite on the cervix, cranial to the planned site of cervical amputation. This when approximated prevents an anterior enterocele.

H. Cervical amputation is done as per our assessment. We can be liberal in the level of cervical amputation if the woman no longer desires fertility. In women desirous of fertility, it is better to leave around 2-2.5 cms. of the cervix.



I. Formation of the posterior lip is facilitated by tucking the redundant posterior vaginal wall into the cervical canal with the help of Bonney – Sturmdorf suture which starts posteriorly at 6 0'clock.



J. Formation of the anterior lip is facilitated by the passage of the Fothergill's suture which starts from the lateral vaginal skin at the level of the third and fourth Fothergill's point. This is continued with a bite on the cardinal ligament pedicle and then enters the cervical canal from without inwards at the 12 0' clock position. The needle now comes out of the cervical canal a little away from the place where it entered. The stitch is continued to take a bite on the cardinal ligament pedicle and comes out at the Fothergill's lateral point. When this suture is tied, the cardinal ligaments are approximated in front of the cervical stump, thereby effectively anteverting the uterus and advancing the cervix higher up in the vagina. Small additional

sutures may be taken to ensure a good cover of the cervical stump. Redundant anterior vaginal walls are trimmed and approximated.

K. Posterior colporrhaphy is done in the usual way.

L. Modification of Fothergill procedure.

Modified Manchester procedure combines anterior colporrhaphy with amputation of the cervix and extraperitoneal plication of the uterosacral ligaments with the use of 3-4 delayed absorbable No.1 suture . The most cranial suture is fixated through the posterior fornix of the vagina. This is performed with or without posterior colporrhaphy.

Sacro spinous hysteropexy can also be combined if a more robust support is required.

Complications

1. Bleeding
2. Injury to bladder and bowel
3. UTI
4. Cervical stenosis (leading to hematometra & pyometra)

5. Cervical incompetence (leading to abortions & preterm labour)
6. Dyspareunia

Conclusion

Modified Manchester or Fothergill repair is a good procedure for a selected group of women suffering from stage 2-3 POP, particularly in women having cervical elongation and desire uterine preservation. Women who have completed their family are better candidates for this procedure.

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Cervical Fibroids

Dr. Vijayalakshmi Kandasamy

Introduction

Leiomyomas or fibroids as they are commonly called are benign tumours arising from the smooth muscle cells of the uterus. Although they are predominantly comprised of muscle cells, they also have fibrous tissue in varying amounts.

Fibroids have a, prevalence of 5-21%, recorded from worldwide studies. The incidence is highest among the African race, with some studies showing up to 60-70% incidence in women over the age of 35 years.

Etiology and Risk Factors:

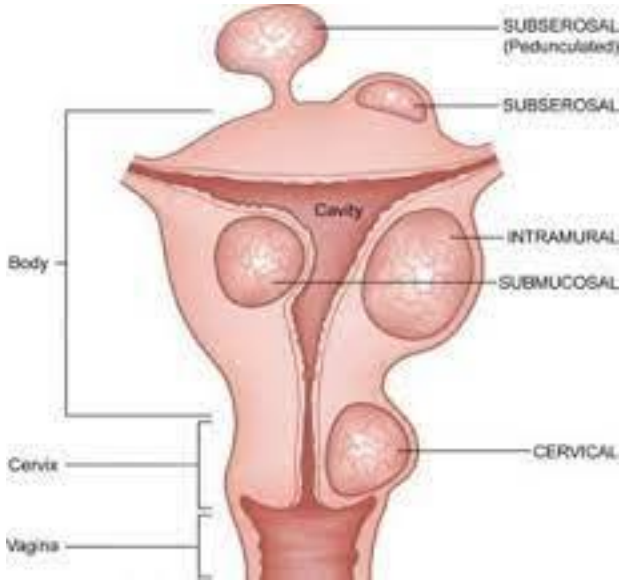
The precise etiology of fibroids is not clearly understood. There are many risk factors for the development of fibroids. These are related to excessive estrogenic influence like early menarche, late menopause, nulliparity and hyper-estrogenic states. The strongest association is seen with ethnicity and family history of fibroids. There may an increased expression and responsiveness to progesterone receptors as well. They are monoclonal tumours, which are dependent on both estrogen and progesterone for their growth. The mutations seen in myomas are translocation between chromosomes 12 and 14, deletion of 7q and trisomy of chromosome 12. Fibroids are rarely seen before menarche and usually regress

after menopause. Majority of the fibroids are asymptomatic

and are identified incidentally during ultrasound of the pelvis.

Pathogenesis:

Fibroids are classified based the anatomical location they arise from, into uterine and extra uterine. Uterine fibroids are submucosal, intramural and subserosal. Extra uterine fibroids are cervical and broad ligament myomas.



Cervical myomas arise from the cervix exclusively and are further classified as anterior, central and posterior, based on their location. They are much rarer and form only 2-3% of all leiomyomas.

Cervical fibroids may arise from the vaginal portion or the supravaginal part of the cervix.

Supravaginal Cervical fibroid types:

- Interstitial
- Sub-peritoneal
- Polypoidal

Vaginal types:

- Pedunculated
- Sessile

Symptoms of Cervical Fibroids:

Fibroids present in the vaginal part of the cervix may cause, abnormal uterine bleeding, intermenstrual or post coital bleeding. Deep dyspareunia is also noted in some women. They may cause excessive vaginal discharge, sometimes offensive if superficial infection sets in. Infertility is a rare symptom. These fibroids produce predominantly urinary symptoms. Anterior cervical myomas impinge on the bladder and upper urethra, displacing the urethro-vesical junction and produce an increased frequency of micturition, or retention of urine. Central myomas displace the ureters and may cause ureteric compression. This may lead to proximal hydroureteronephrosis. Constipation may be seen in posterior cervical fibroids, when they produce pressure on the rectum. The presence of large cervical fibroids in pregnancy is an indication for Caesarean delivery due to its space occupying nature.

Diagnosis & Management:

A thorough clinical examination is helpful. Fibroids present on the vaginal part of the cervix can be identified by speculum examination. A proper bimanual pelvic exam can help identify a cervical fibroid located in the supravaginal part of the cervix.

Transvaginal USG is a simple diagnostic modality to identify these fibroids. MRI pelvis is the gold standard to map the fibroid, its number and precise location and compression effects over the ureters. Some cervical fibroids can grow up to a huge size, so that the normal sized uterus sits over the tumor and this is described as the "Lantern on St. Paul's Cathedral" appearance.

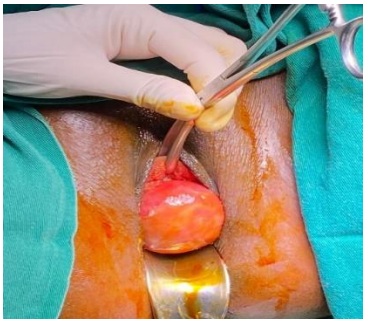
Management of cervical fibroids is dependent on multiple factors. Age of the patient, site, size and number of fibroids, symptoms and desire for fertility or menstrual function are key factors influencing the decision on its management.

Small cervical fibroids on the vaginal part of the cervix can be managed conservatively, in both younger and perimenopausal women. Large fibroids will have to be managed surgically. The options are laparoscopic or open myomectomy or hysterectomy. Pre procedure ureteric stenting will help reduce the risk of ureteric injury during surgery. Uterine Artery Embolization is an option for medium sized fibroids between 5- 8cms in size. Vaginal myomectomy can be done for pedunculated myomas and sessile ones arising from the vaginal portion of the cervix. Central cervical fibroids will necessitate a hysterectomy and hence appropriate pre op counseling is a must.

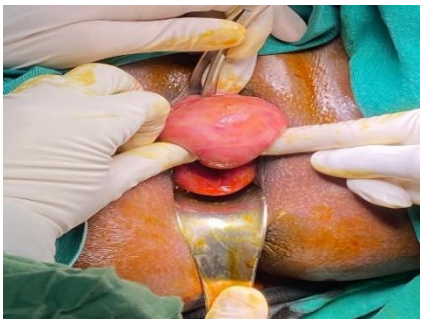
Conclusion:

Cervical Fibroids although rarely found, pose a challenge for the gynecologist in managing them. Pre-Operative counseling for hysterectomy is better to be obtained from these women.

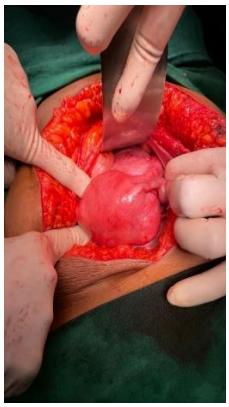
Sessile Cervical Fibroid



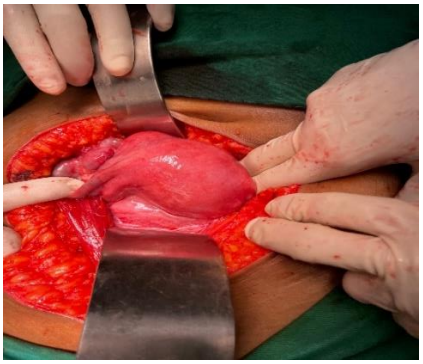
Pedunculated Cervical Fibroid



Huge Cervical Fibroid



Lantern on St.Paul's Cathedral



Hysterectomy specimen – huge cervical fibroid

CIN Treatment Options

Dr. Bhagyalaxmi Nayak MD FICOG PhD
Co Chair Oncology Committee SAFOG
Governing Council Member ICOG

Cervical carcinoma is one of the most common disease among women – with India accounting for around 16% of the total cervical cancer cases globally. Although the incidences had reduced over the years, cervical cancer is still one of the leading causes of cancer mortality, accounting for 17% of all cancer deaths among women aged between 30 and 69 years. And Globocan 2020 shows a rise in incidence. Cervical intraepithelial neoplasia (CIN) is a premalignant squamous lesion of the uterine cervix diagnosed by cervical biopsy and histologic examination. The goal of management is to prevent possible progression to cancer while avoiding overtreatment since lesions can spontaneously regress and treatment can have morbid effects.

Colposcopy with directed biopsy is the preferred method for evaluation of an abnormal pap smear result. "Co-testing" combines cytology and HPV testing for high-risk types, but is still considered screening. The diagnosis ultimately requires tissue sampling.

Exceptions to this rule are women aged 21 to 24 with LGSIL cytology because of the high rate of disease resolution and repeat cytology at 12-month intervals is the recommendation. This same age-group of women with Pap smear results showing atypical squamous cells-cannot exclude high grade (ASC-H), atypical glandular cells, or HGSIL results on repeat cytology; colposcopy is the recommendation. For follow-up Pap smears showing ASCUS, LGSIL or negative, the recommendation is to repeat in another 12 months. For those patients with repeated ASCUS or LGSIL at 24 months, colposcopy is recommended.

Patients older than 24 years of age with ASCUS with positive high-risk HPV and LGSIL or higher should undergo colposcopy. Regardless of age, women with HGSIL or ASCUS-H should have a colposcopy. With a diagnosis of CIN 2 or more, excisional treatment is recommended. With the subgroup of younger women, close observation with colposcopy may be appropriate if they are compliant with follow up.

CIN-1 can undergo observation and co-testing repeated in 1 year. If CIN-1 is persistent after 2 years or progresses within that time, treatment is the recommendation. More than half of CIN 1 will regress spontaneously in 1-2 years' time.

- Close surveillance is the preferred option in these cases.
- However, treatment of CIN 1 may be indicated under the following circumstances:
    - Prior cytology report of ASC-H, HSIL
    - Extensive lesion,
    - Unsatisfactory colposcopy,
    - Lesions which persist beyond 18-24 months,
    - Immune-compromised patients

- Patients who are not reliable for follow up.

- If treatment is decided and the colposcopy examination is adequate, either excision or ablation is acceptable. Ablation is the preferred method of treatment if the margins are visible.

CIN2&3

The chance of spontaneous regression is much less with CIN 2 and 3, hence treatment is recommended in most.Markers like Ki67 and P 16 are markers that can be helpful in situations (CIN 2) where there is a dilemma to treat or not.Treatment is recommended if CIN 2 is positive for the proliferative markers or the lesion persists for two years or worsens. CIN3 is an immediate precursor to invasive cancer. Therefore immediate treatment is advocated. Excisional procedures are preferred to ablative.

Treatment is also recommended when there is more than one degree of difference between pap results and biopsy results. For example, if the pap smear is high-grade intraepithelial lesion (HGSIL), but the biopsy is negative, the potential reasons are a misread of the specimen, or there was a missed a lesion at the time of colposcopy. In this case, a diagnostic excisional procedure is the preferred mode of treatment because it is both therapeutic and diagnostic. The margins of the cervical specimen may then undergo evaluation for complete removal of any abnormal cells.

The usual treatment is via ablation or excision of abnormal cells. Ablation of abnormal cells includes cryosurgery or laser ablation (CO_2 laser). Ablation is only acceptable when the endocervical sampling is negative, there are no glandular abnormalities, the entire borders of the lesion are visible, and the patient has not failed other treatments. These techniques were more common before the development of LEEP (loop electrosurgical excision procedure). WHO

comprehensive cervical cancer control: a guide to essential practice in 2006 recommended the implementation of screen and treat algorithms where women who are tested positive for screening test are treated with ablative treatment (destruction of the cervical transformation zone, including the lesion). Thermal ablation is another novel ablative treatment for CIN.The equipment is fairly simple and treatment is based on a 20-30 second application of reusable metallic probe that is electrically heated to approximately 100 degree celsius, leading to epithelial and stromal destruction of the lesion Ablative procedures have a higher recurrence rate in the setting of severe dysplasia when compared to LEEP.

Excisional procedures for the treatment of CIN include LEEP, cold knife conization, and laser conization. Whether any of these procedures increase a patient's risk for preterm labor is controversial since the risks for preterm delivery and dysplasia overlap considerably. That said, in women younger than 25 with CIN-2 or 3, there may be a role for close observation with colposcopy in 6 months rather than excision. However, that is not the currently preferred treatment option. During pregnancy, treatment is postponed until after delivery unless colposcopic surveillance during pregnancy reveals progression to invasive cervical cancer.

Women treated for CIN-2, or greater should have a Pap smear and HPV testing 12 and 24 months after the procedure. Even with positive endocervical margins on an excised specimen, the procedure is deemed 70 to 80% effective. When margins are positive, repeat cytology testing in 4-6 months accompanied by an endocervical curettage is the course of action. A repeat excisional procedure is one option for treatment of persistent or recurrent CIN-2 or 3. In some circumstances, patients will opt for a hysterectomy, which is also appropriate for recurrent CIN.

CIN in pregnancy:

- General principles – The objective of screening during pregnancy is to pick up invasive disease. Treatment is only recommended for invasive carcinoma during pregnancy.
- Treatment of CIN 1 in pregnant women or those desirous of pregnancy is not recommended. Preceding cytology ASCUS, LSIL -- repeat cytology at 1 year. Preceding cytology of ASC-H, HSIL -- repeat cytology and colposcopy at six months.
- In CIN2 & 3 Repeat cytology and colposcopy at 6 months. Cervical intraepithelial neoplasia 3 or CIS do not pose risk to the pregnancy or any immediate risk to the mother. Treatment during pregnancy carries substantial risk of haemorrhage and pregnancy loss hence is deferred to six weeks after delivery.

Non surgical treatments:

Indole-3-carbinol orally showed a 50% regression in treatment group as compared to placebo. ZYC101a (encapsulated plasma DNA), MVA-E2 (therapeutic vaccine) and HSP E7 HPV 16(heat shock protein fused with E7 oncoprotein) have been used in Therapeutic vaccine(subcutaneous injection), interferon (intralesional injection) and topical anti-viral cidofovir are being used in some centers.

Follow up after CIN:

In properly selected patients cure rates are equal for ablative or excisional methods; to the tune of more than 90%. In women treated for CIN 2 and CIN 3, co-testing at 12 months and 24 months is recommended. If both co-tests are negative, retesting in 3 years is recommended. If any of the tests is abnormal, colposcopy

with endocervical sampling is recommended. If all tests are negative, routine screening is still recommended for at least 20 years, even if this extends screening beyond 65 years of age. There is no consensus on the best method of follow up after treatment for CIN (cytology versus HPV testing versus colposcopy). Margin positive patients should be followed up more carefully.However many recent studies have shown higher sensitivity of HPV testing for detection of residual or recurrent disease. Diagnostic excisional procedure is recommended for recurrent CIN, if colposcopy is inadequate or if there is endocervical involvement, and ablation is unacceptable in these situations

Conclusion:

The aim of management is to effectively eradicate the disease with minimal short and long term complications, specifically related to future fertility and pregnancy. In appropriately selected cases cure rates for ablative and excisional methods are similar. It is important to tailor the treatment on an individual basis depending on the extent, size and location of the lesion and the availability of the technical expertise. Long term follow up of patients is mandatory as the risk for the development of pre-invasive or invasive lesions continues even decades after the treatment. There is emerging data on the role of HPV testing in the follow-up of patients after treatment for CIN.

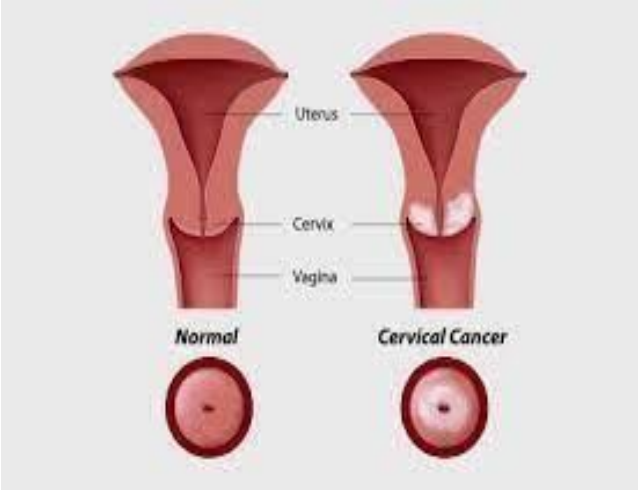
Cancer Cervix

Dr. Mahalakshmi

Introduction:

Cancer of the uterine cervix is one of the most common gynecologic cancers diagnosed worldwide. Cervical cancer remains a significant cause of cancer morbidity and mortality in developing countries. Human papillomavirus is central to the development of cervical neoplasia and can be detected in 99.7 percent of cervical cancers. More than 75 percent of cases are due to high-risk HPV 16 and 18. Although there are more than a half-million cases of HPV identified annually, most are low-grade infections and will spontaneously resolve within two years. Progression of high-grade lesions and cancer are seen in the presence of other carcinogenic factors. The most common histologic types of cervical cancer are squamous cell (70 percent of cervical cancers) and adenocarcinoma (25 percent). Cervical cancer intervention focuses on primary and secondary prevention. Primary prevention and screening is the best method to decrease the burden of cervical cancer and to decrease mortality. In the developing countries most screening and diagnostic efforts are directed towards early identification of high-risk human papillomavirus (HPV) lesions through HPV testing and Pap smears. Although HPV testing is not recommended in women younger than 30 years of age, low-risk younger women should begin

screening with Pap tests at age 21 and continue until age 65, according to the United States Preventive Services Task Force recommendations. Newer recommendations offer 3 to 5-year intervals between screening based on prior results and the use of pap and HPV co-testing. Since cervical cancer is a sexually transmitted infection, it is a preventable disease. Targeted education, screening, and intervention can reduce the burden of disease. Like many diseases and cancers, disparities exist in screeningrates, early diagnosis, and timely treatment. Screening rates tend to be less in low socioeconomic and low resource areas with ethnic and age variations. Vaccination can improve cancer death rates in underdeveloped countries where resources may not be available for routine screening and in populations with higher mortality rates.



FIGO STAGING:

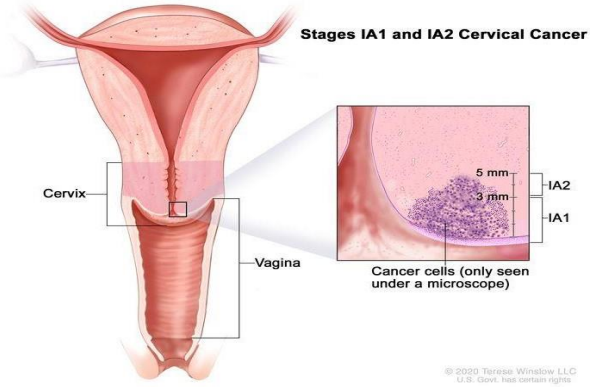
Stage I :

Stage I is carcinoma strictly confined to the cervix; extension to the uterine corpus should be disregarded. The diagnosis ofboth Stages IA1 and IA2 should be based on microscopic examination.

Stage IA: Invasive cancer identified only microscopically.
Invasion is limited to measured stromal invasion with a maximum depth of 5 mm.

Stage IA1: Measured invasion of the stroma <3mm in depth.

Stage IA2: Measured invasion of stroma greater than 3 mm but no greater than 5 mm in depth.

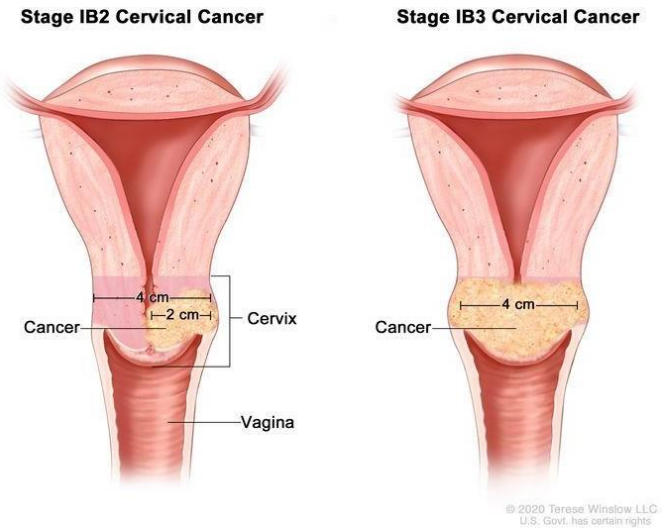


Stage IB: Invasive carcinoma confined to the uterine cervixwith measured deepest invasion >5mm

Stage IB1: Clinical lesions <2cm in greatest dimension.

Stage IB2: Clinical lesions 2 – 4cm in greatest dimension.

Stage1B3: Clinical lesion >4cm in greatest dimension.



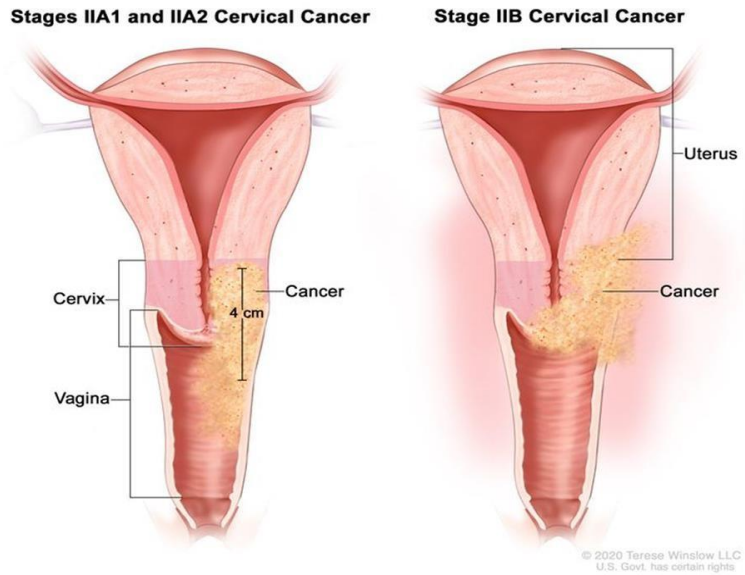
Stage II : Carcinoma that extends beyond the cervix, but doesnot extend into the pelvic wall or to the lower third of the vagina.

Stage IIA: No obvious parametrial involvement. Involvementof up to the upper two-thirds of the vagina.

Stage IIA1: Carcinoma < 4cm in greatest dimension.

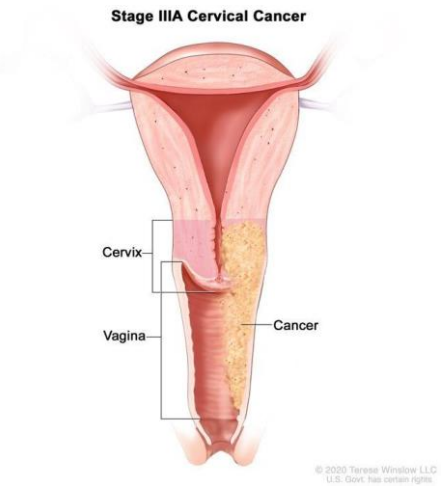
Stage IIA2: Carcinoma >4cm in greatest dimension.

Stage IIB: Obvious parametrial involvement, but not into thepelvic sidewall.

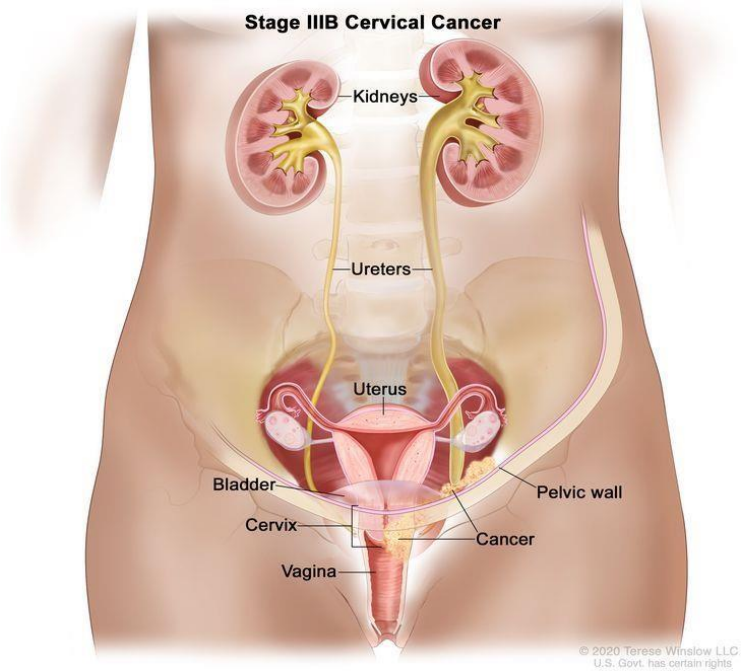


Stage III : Carcinoma that has extended into the pelvic sidewall / involves the lower third of the vagina and / or causes hydronephrosis or a non-functioning kidney and/ orinvolves pelvic and/or para-aortic lymph nodes.

Stage IIIA: No extension into the pelvic sidewall butinvolvement of the lower third of the vagina.

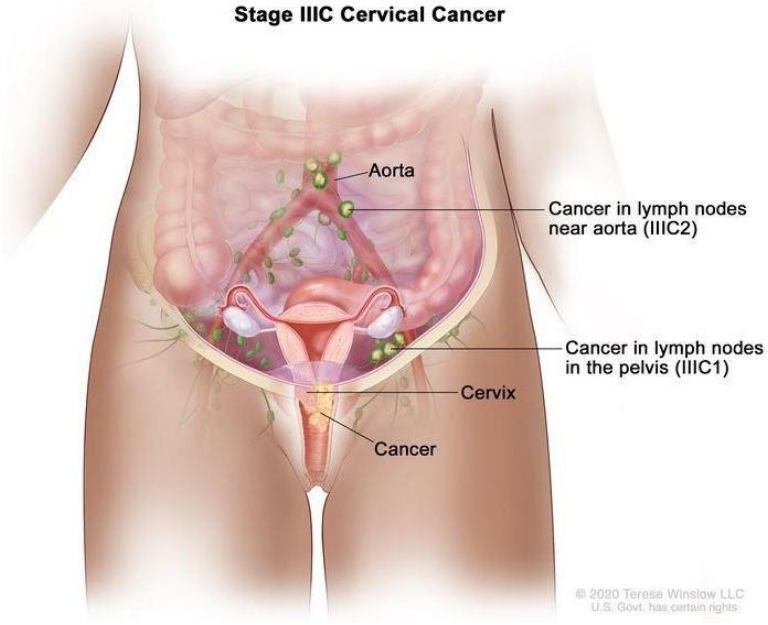


Stage IIIB: Extension into the pelvic sidewall or hydronephrosis or non-functioning kidney.



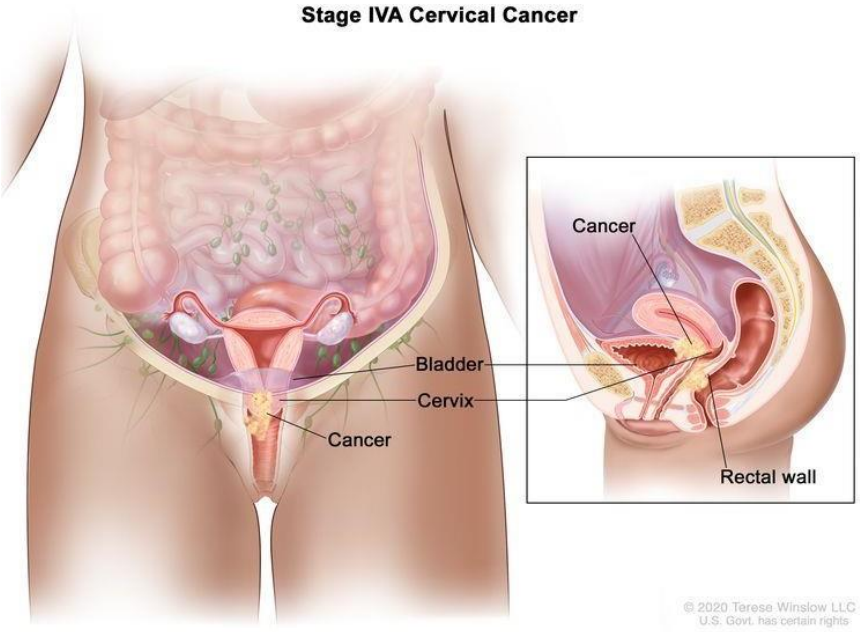
Stage IIIC: Involvement of pelvic and/ or para-aortic lymph nodes, irrespective of tumour size and extent (with r and pnotation)

IIIC1: Pelvic lymph node metastasis only IIIC2: Para aortic lymph node metastasis.

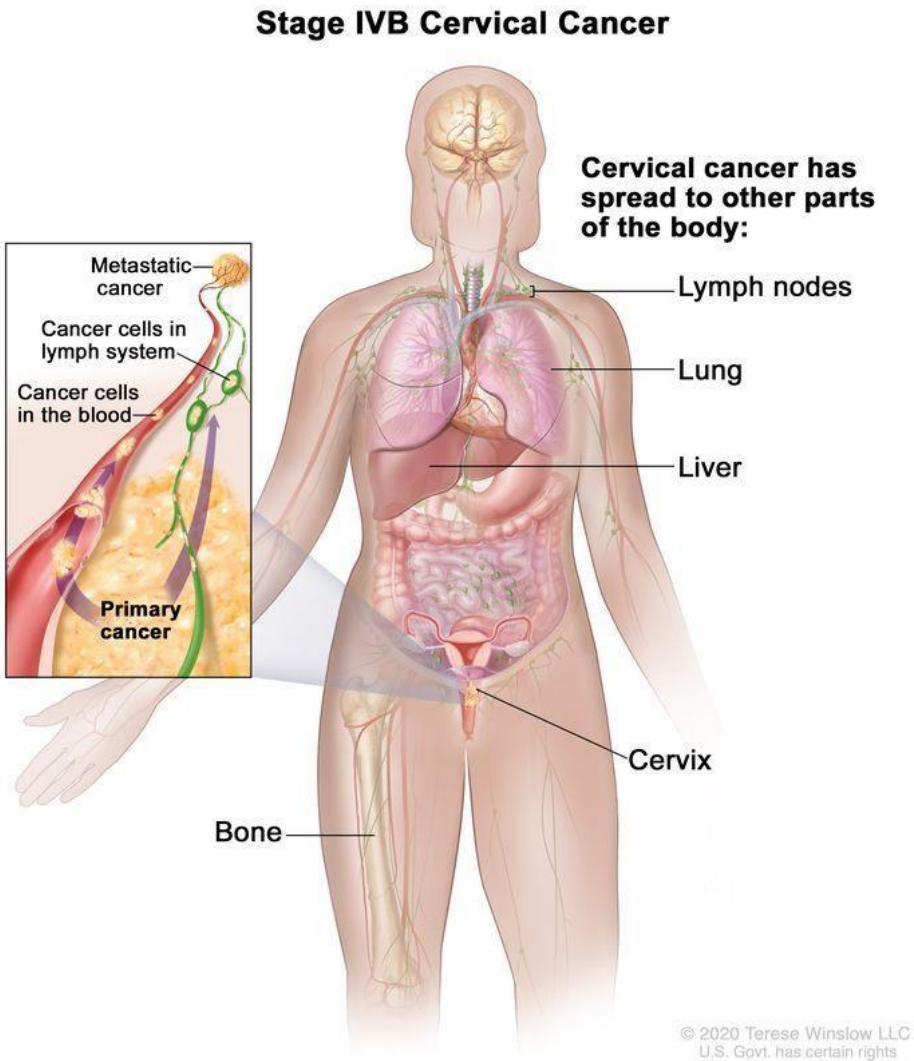


Stage IV: Carcinoma that has extended beyond the true pelvis or has biopsy proven involvement of the mucosa of thebladder and/or rectum.

Stage IVA: Spread of the tumour into adjacent pelvic organs.



Stage IVB: Spread to distant organs.



NOTE:

† Stage IIIC should be annotated with r (radiology) or p(pathologic analysis) to indicate the method used to allocate this stage. Imaging modality or pathologic technique should also be documented.

TNFOG

Upcoming

Events

TNFOG in Association with
Dr.MGR Janaki College of Arts and Science for Women

AWARENESS PROGRAM

"Adolescents Health"

9th October, 2021 @ 4.00pm

Dr. Anjalakshi Chandrasekar
President TNFOG

Welcome Address

Dr. Sampath Kumari.S
Secretary TNFOG

Topic: Sexual Health

Dr. A Jaishree Gajaraj
President ATNRCOG

Topic: Menstrual Health

Topic: Teenage Pregnancy

Dr. R .Premalatha

Topic: Mental Health

Dr. P.B .Premalatha

Topic: Nutrition

Q&A CLICK HERE

TNFOG - BODHANA
PG Case Discussion

On 9th October 2021, Time: 5.30pm – 7.00pm

Topic: Anaemia complicating pregnancy case discussion

Welcome Address

Dr. Anjalakshi Chandrasekar
President TNFOG

Case presenter

Dr.Sandhya Devi TM
ISO KGH
Madras Medical College

Coordinators

Dr. Sampath Kumari.S
Secretary TNFOG

Dr. Kalpana.B

Internal

Dr.Kalaivani K
Director ISO-KGH

Dr .C.Sumathi
Deputy Director ISO KGH

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