

OBSTETRICS AND GYNECOLOGY

Commonly Used Medical Instruments in Obstetrics & Gynaecology

Leader: Alanoud Alyousef

Sub-leader: Dana ALdubaib

Done by: Nadia aljomah

Revised by: Latifah Al-Fahad

Points to Know for the Exam

- Identify the instrument / treatment
- The uses / indications of the instrument
- Contraindications of the instrument use
- Prerequisites for the use of instrument
- Complications of the use of the instrument

Vaginal Speculums



Sim's
speculum

This is for vagina **only**
Best for vaginal wall

Cusco Speculum. To look
at the cervix.

Identify the instrument / treatment?

Vaginal Speculums

The uses / indications of the instrument

It is Used during clinical examination to visualized the vagina and the cervix

if they ask you specify you should say: cervix

Contraindications of the instrument use

History of vaginal bleeding

Prerequisites for the use of instrumen

Sterilize it if it is metallic but nowadays some of the hospitals use a plastic disposal one.

Complications of the use of the instrument

Points about the disease in relation to the instrument

To visualize the cervix.

Cusco Speculum



Grave Speculum



Devilbiss Speculum



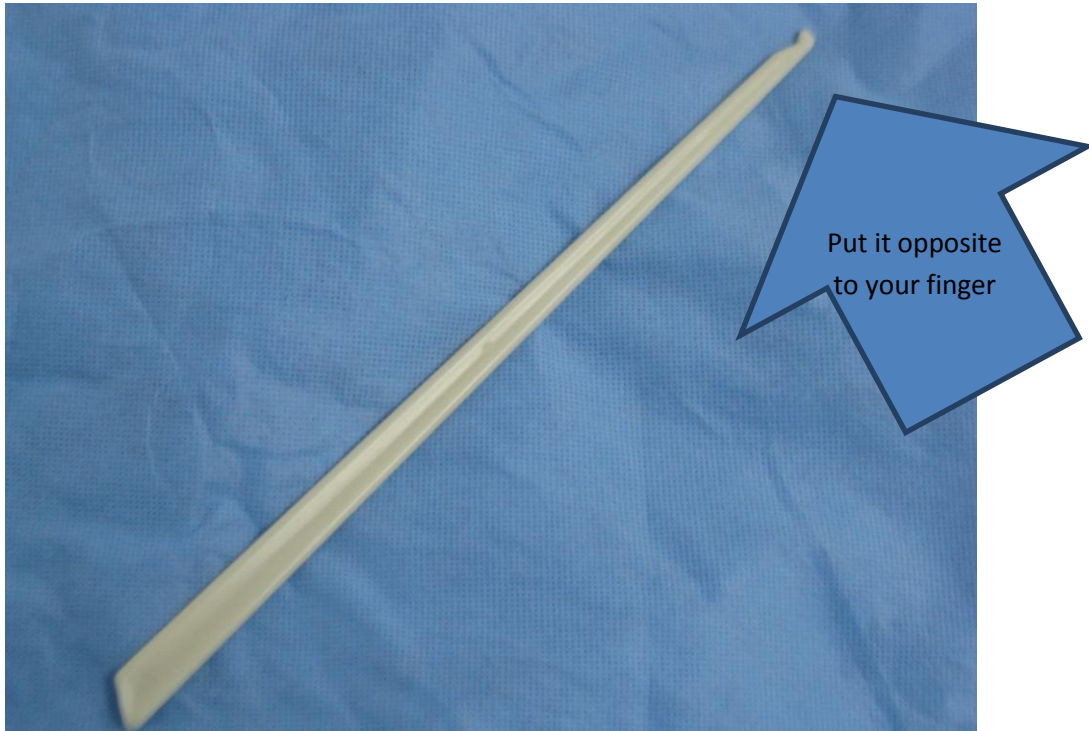
Choose according to the shape of the vagina

Surgical Retractors



- **What is the name?**
Surgical Retractors
- **What are the uses (indications- diseases) ?**
Used during abdominal or pelvic surgeries
(the big one is the main instrument that is usually used to hold the lower segment of the uterus in C. section to get the baby out.)
- **Any contraindications?**
-
- **Any Prerequisites (conditions) ?**
-

Amniohook



- **What is the name?**
amniohook
- **What are the uses (indications- diseases) ?**
To rupture the membrane (amniotomy)
- **Any contraindications?**
 - IF there is infections like (herpes , hepatitis)
 - Rule out placenta previa
- **Any Prerequisites (conditions) ?**
Dilated cervix: if >2 cm or if you can put 2 fingers in.
Engagement of the head - to avoid cord prolapse which may lead to asphyxia and death
Check if the mother has infections
Check if the placenta is in the right place
- **Any Complications can happen during or after?**
Vaginal or cervical injury

Doyen's Retractor



- What is the name?

Doyen's retractor

- What are the uses (indications- diseases) ?

To retract the lower uterine segment or the abdominal tissue during surgery. (to retract the urinary bladder in particular)

- Any contraindications?

-

- Any Prerequisites (conditions) ?

-

- Any Complications can happen during or after?

May cause contusions of the bladder resulting in hematuria

Forceps

Kiellands forceps

The only one that has sliding hook

Here it can be used to rotate the head if it is occipito-posterior as well as pulling the fetus.

Unlike the other types that only pull but don't rotate.

(it can be used when the head is very high – midcavity forceps)



wrigleys:

Can be used when the head is below zero station we use (out-let forceps)

Simpsons: we use it when the head as high as -1 station. It is also used in C.S. if the fetus is breech

● What is the name?

FORCEPS

● What are the uses (indications- diseases) ?

Pull the head of the fetus if it is low down in the vagina +1 or below 0

● Any contraindications?

1. Cephalo pelvic disproportion (CPD)
2. Malpresentation "face"
3. Very immature fetus
4. Big Baby

● Any Prerequisites (conditions) ?

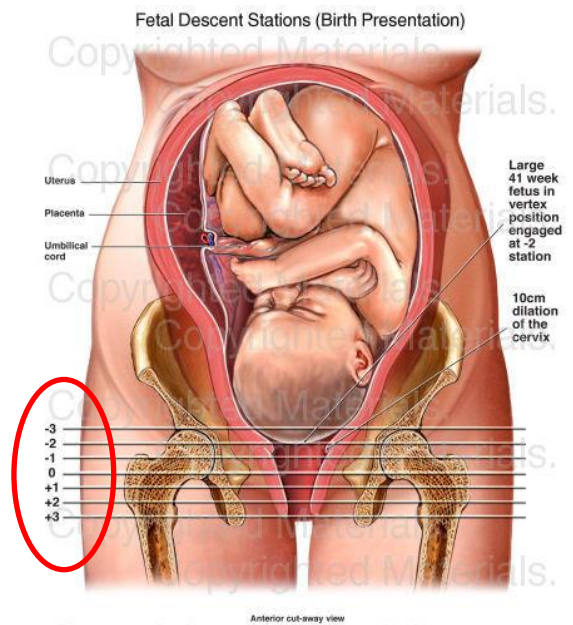
1. fully dilated cervix
2. engagement of the head
3. the fetus must be occipito-anterior
4. empty bladder and rectum
5. episiotomy
6. The Examiner must have experience
7. ruptured membrane
8. cephalic presentation
9. adequate pelvic for the fetus to come out.
10. good anesthesia

Important

Any Complications can happen during or after ?

1. May tear the vaginal wall and cause bleeding.
2. for **Kiellands** forceps, when it is rotated it may damage the infant.

That's you only selected people are using it.



Vacuum OR Ventose



- **What is the name?**

Vacuum or ventose

- **What are the uses (indications- diseases) ?**

Same as in forceps except the direction of the baby ... here even if the fetus head is not occipito-anterior we still can use it. You also can do rotation and pulling in the same time

- **Any contraindications?**

1. Cephalo pelvic disproportion (CPD)
2. Malpresentation "face"
3. Very immature fetus
4. Big Baby

- **Any Prerequisites (conditions)?**

1.Don't place it at the site of anterior frontalis you could injured the brain.

2.Put your finger and take a round around the vacuum to make sure the vagina is not included

3.when you vacuum start one .. two .. and by the third time the fetus should be out. If the third attempt fails to pull the baby, the ventose should be discontinued.

- **Any Complications can happen during or after ?**

- Edema - laceration of fetal head
- Maternal tissue (vaginal) injury if you pull it by mistake

Hegar's Dilators



- **What is the name?**
Hegar's Dilators
- **What are the uses (indications- diseases) ?**
 1. Dilating the cervix in gyne operations (dilatation and curettage)
 2. when inserting IUCD
- **Any contraindications?**
(never used in labor)
- Any Prerequisites (conditions) ?
...
- **Any Complications can happen during or after ?**
 1. CERVICAL laceration
 2. perforation of the uterus

Uterine Sound



- What is the name?

Uterine sound

- What are the uses (indications- diseases) ?

To measure the uterine cavity length before certain procedures like dilatation and curettage. Also, to assess the position of the uterus.

- Any contraindications?

..

- Any Prerequisites (conditions) ?

...

- Any Complications can happen during or after ?
Perforation.

Curette



- What is the name?

Curette. Type:

1.sharp: never use in pregnancy

2.blunt: used for abortion if there was retained tissues

- What are the uses (indications- diseases) ?

Diagnostic curettage: bleeding .. amenorrhea .. sterility

Therapeutic curettage: for temporary or permanent cure of non-malignant uterine bleeding

- Any contraindications?

- Any Prerequisites (conditions) ?

Don't go vigorously into the basalis layer of the endometrium to avoid adhesions (asherman syndrome).

- Any Complications can happen during or after?

- Perforation
- Asherman syndrome (if you remove the basalis of endometrium)

Fetal Scalp Electrode



- **What are the uses (indications- diseases) ?**

It is connected to the CTG to record the fetal heart rate during labor. It is used when the transabdominal CTG fails to record good fetal heart measures or in case of twins (the first one is monitored by the electrode while the other by the transabdominal method)

- Any contraindications?

- Any Prerequisites (conditions) ?

- **Any Complications can happen during or after?**

1.injury to the maternal tissue.

2. spread of infections from the mother to baby (hepatitis – HIV)

Green Armitage Clamp



- **What are the uses (indications- diseases) ?**

It is usually used during the operation on the lower uterine segment like **C section**, to hold the flaps of the uterine incision to **control bleeding**

- Any contraindications?

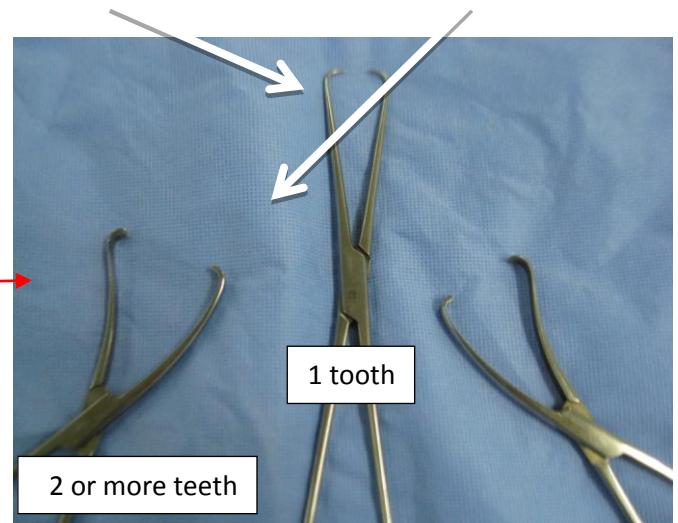
- Any Prerequisites (conditions) ?

- Any Complications can happen

Cervical Clamps



Tenaculum / Vulsellum



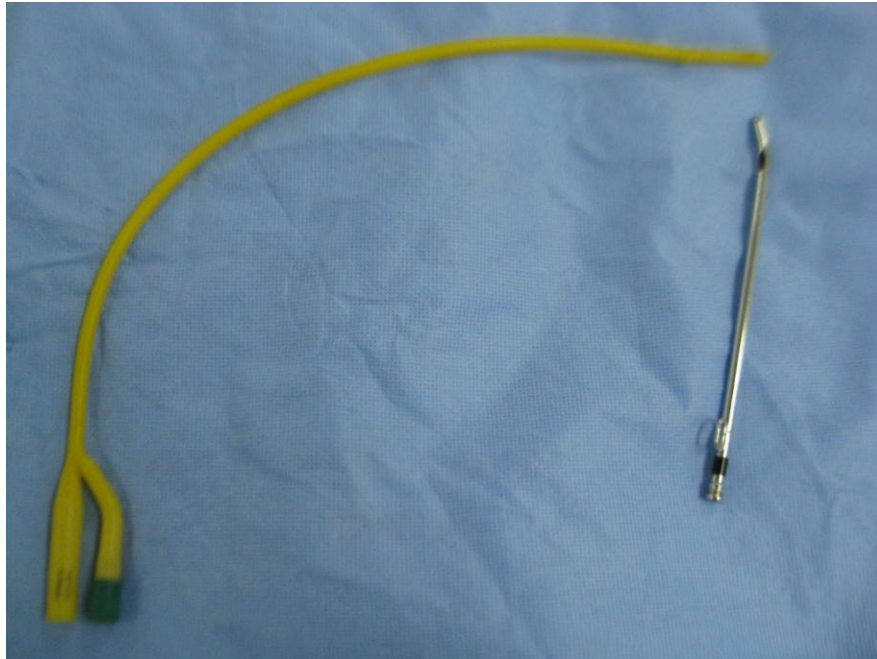
- What is the name? Cervical clamps
- What are the uses (indications- diseases) ?
To catch the cervix in vaginal surgery (also in hysterectomy)
- Any contraindications?
You can use it in pregnancy but be gentle.
- Any Prerequisites (conditions) ?
- Any Complications can happen during or after ?
May cause bleeding

Ring (Sponge) forceps



- What is the name? Ring sponge Forceps
- What are the uses (indications)?
In pregnancy, this is preferable to hold the cervix (not traumatic)
 1. to grasp the soft lips of the cervix and evacuate a pregnant uterus per vagina.
 2. Used to remove corporeal and cervical polyps
 3. Can be used as a sponge carrier
- Any contraindications?
- Any Prerequisites (conditions) ?
- Any Complications can happen during or after ?

Urethral Catheters



- What is the name?

Urethral Catheters

1- Rubber 2- metallic

- What are the uses (indications- diseases) ?

To evacuate the bladder

The **rubber type** can be used to induce labor

- Any contraindications?

- Any Prerequisites (conditions)? Sterilization.

- Any Complications can happen during or after ?

1- Infection 2- urethral injury (truma)

Laparoscopic Set



Laparoscope

Trocar (Sleeve & Needle)



Veress Needle



- What is the name?

Laparoscope. (if they ask you about the name in the exam say laparoscope)

- What are the uses (indications-diseases)?

Laparoscopy is a surgical procedure in which a fiber-optic instrument is inserted through the abdominal wall to view the organs in the abdomen or permit small-scale surgery.

(it gives you magnification of the organs)

Veress needle indications:

- 1- To make incision in the laparoscopic procedure.
- 2- For CO₂ inflation of the abdomen prior to laparoscopy. (to create pneumoperitonium)

Laparoscope indications : (used for laparoscopy)

- 1- **Therapeutic:** ectopic pregnancy – tubal ligation – adhenolysis.
- 2- **Diagnostic:** PID – infertility – endometriosis.

- Any contraindications?
- Any Prerequisites (conditions) ?

- Any Complications can happen during or after ?

- 1- Infections
- 2- bleeding (laceration of vessels)
- 3- bowel perforation
- 4- subcutaneous emphysema
- 5- adhesions are more in laprotomy

Cervicala Spatula & Cytobrush



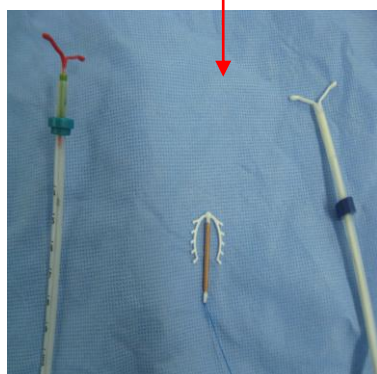
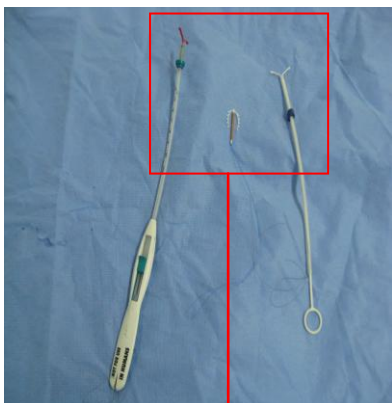
- **What is the name?**
Cervicala Spatula & Cytobrush
- **What are the uses (indications- diseases)**

Used for pap smear.

1. HPV
 2. cervical cancer
 3. Routine exams
 4. Post coital bleeding
- Any contraindications?
 - Any Prerequisites (conditions) ?
 - Any Complications can happen during or after ?

Detailed in
Contraception
lecture

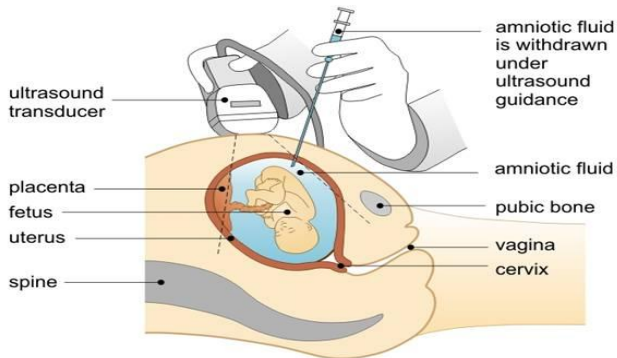
Intrauterine Contraceptive Device (IUCD)



- **What is the name?**
Intrauterine Contraceptive Device (IUCD)
- **What are the uses (indications- diseases) ?**
Contraception. (0.3% failure)
- **Any contraindications?**
 - 1- Pregnancy – ectopic pregnancy
 - 2- IPD
 - 3- Perforation because of an IUCD
 - 4- History of ectopic pregnancy (better not to)
- Any Prerequisites (conditions) ?
- **Any Complications can happen during or after ?**
 - 1- Perforation
 - 2- infections
 - 2- Irregular vaginal bleeding
 - 3- The copper one will cause heavy bleeding

Amniocentesis

Detailed in fetal assessment lecture



● What are the uses (indications- diseases) ?

- 1- Cytogenetic 2- keryotyping
- Any contraindications?
- Any Prerequisites (conditions) ?
- Any Complications can happen during or after ?

Ring Pessary



● What is the name?

Ring pessary

● What are the uses (indications- diseases) ?

Pelvic prolapse (for those who can't go for surgery like old women)

- Any contraindications?
- Any Prerequisites (conditions) ?
- Any Complications can happen during or after ?

- 1- Infections
 - 2- Lacerations
- } With improper prolonged use

Birth Control Pills (OCP)



Detailed in
Contraception
lecture

- **What is the name?**

Birth control pills (OCP)

- **What are the uses (indications- diseases)**

Each type has indications.

- **Any contraindications?**

- 1- Personal hx of thrombosis+ known clotting disorders
- 2- Personal hx of stroke and MI
- 3- Labile HTN
- 4- Active liver disease
- 5- Estrogen sensitive malignancy (such as breast cancer)
- 6- Migraines with focal neurologic symptoms
- 7- DVT – warfarin

- Any Prerequisites (conditions) ?

- **Any Complications can happen during or after ?**

Side effects : breast tenderness – decrease libido – headache – weight gain

Question: What is this and what is it used for?

Vaginal Speculums.

Used during clinical examination to visualize the vagina and the cervix.

