

#### SNS COLLEGE OF ALLIED HEALTH SCIENCES



SNS Kalvi Nagar, Coimbatore - 35 Affiliated to Dr MGR Medical University, Chennai

#### DEPARTMENT OF RADIOGRAPHY AND IMAGING TECHNOLOGY

**COURSE NAME: CONTRAST AND SPECIAL RADIOGRAPHY PROCEDURES** 

**II YEAR** 

**UNIT: 12** 

**TOPIC: HYSTEROSALPINGOGRAPHY** 

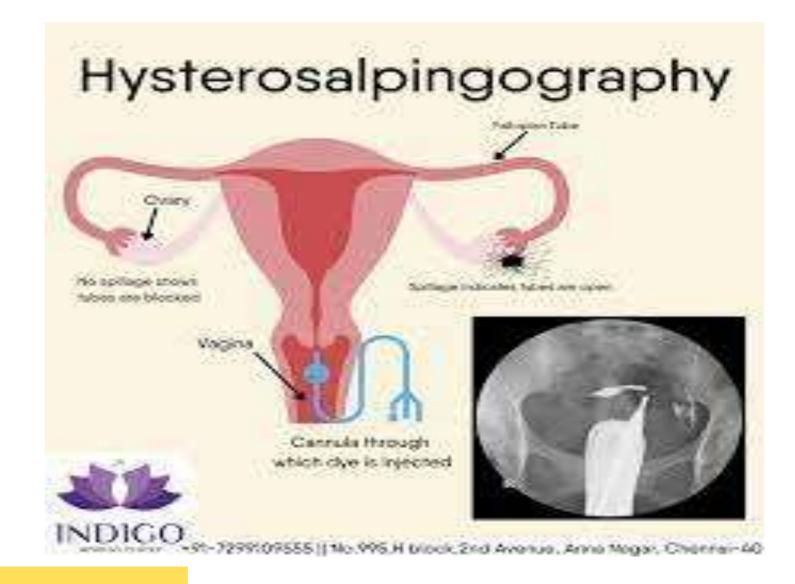


# INTRODUCTION



Hysterosalpingography is the radiographic evaluation of uterus and fallopian tubes under

fluroscopic guidance.





### **INDICATION**



- Infertility (main role)
- Recurrent spontaneous abortions
- Congenital anomalies of uterus
- Post operative evaluation following
  - a) tubal ligation
  - b) reverse tubal ligation
- Suspected case of genital tuberculosis
- To prove tubal occlusion after insertion of transcervical sterilization microinsert (essure).



# **CONTRAINDIATION**



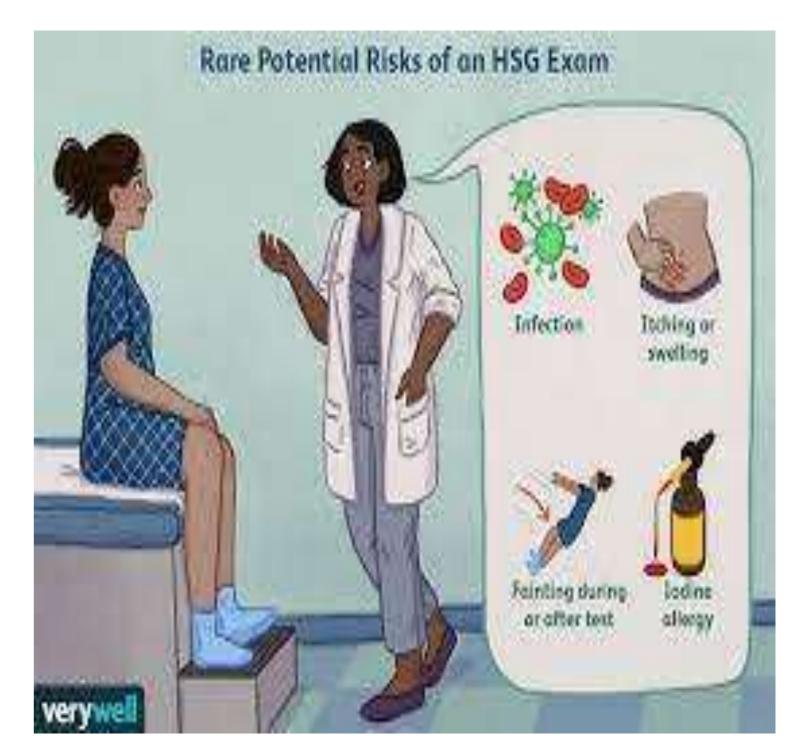
- Suspected pregnancy
- Acute pelvic infectin
- Active vaginal bleeding
- Recent dilation and curettage
- Immediate pre and post menstrual phase
- Tubal or uterine surgery within last 6 weeks
- Contrast sensitivity



### PATIENT PREPARATION



- Done in first half of menstrual cycle in proliferative phase between 8th to 12th day.
- Patient to avoid unprotected sexual intercourse from the date of her period until investigation is over to avoid possible risk of pregnancy.
- If periods are irregular, do urine b-hcg test to rule out pregancy.
- Exclude active pelvic infection.
- Prophylactic antibiotics not routinely recommended.





# **CONTRAST MEDIA**



#### Doses:

Water soluble contrast media

Urograffin 60%

Conray 280

Trivideo 280.

Volume: 10 - 20 ml.

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# EQUIPMENTS REQUIRED







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- An open-sided speculum,
- Tenaculum,
- Sponge stick,
- Antiseptic,
- Contrast medium, and
- An acorn (Cohen) cannula (A) or a balloon-tip catheter (B).



### **PROCEDURE**



- Informed consent is taken.
- Antispasmodic given before procedure.
- Patient is asked to empty bladder immediately before procedure.
- The patient is placed in lithotomy position at the edge of the X-ray table.
- A speculum is introduced into the vagina and the anterior lip of the cervix is held with tenaculum and gentle traction is applied.
- The cannula is inserted into cervical canal under direct vision.
- The speculum is then removed and patient is carefully moved up the X-ray table in supine position.
- Care must be taken to remove all the air bubbles from the syringe and cannula before injecting, as these may mimic polyps or fibroids.



# contd....,

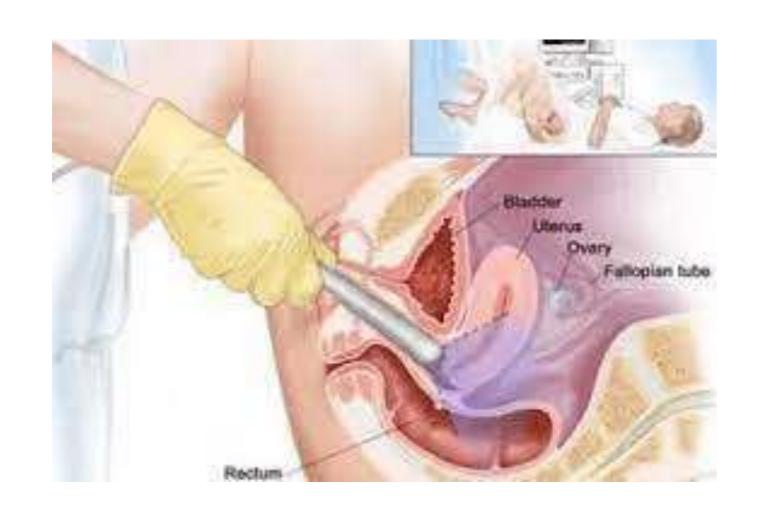


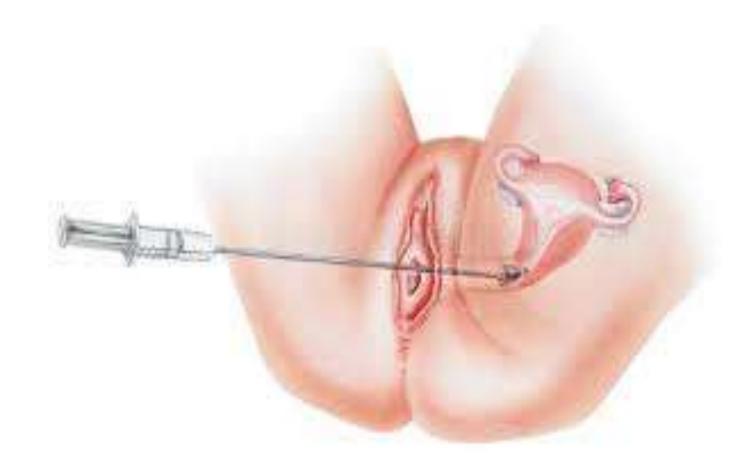
- Under fluroscopic control,2ml of the contrast media is injected to outline the uterine cavity.
- To prevent leak from the cervix,a downward traction should be kept on the tenaculum while keeping an upward pressure to the cannula.
- The injection is then continued slowly governed by the patient's tolerance until the oviducts have been outlined and free intraperitoneal spill of the dye is visualised.
- 3ml contrast to fill uterine cavity and another 3ml to fill tube.(upto 10ml)
- Spot films are taken.
- Afterv end of the procedure, antibiotic course is given and patient is informed about vaginal spotting for 1-2 days.



# PROCEDURE



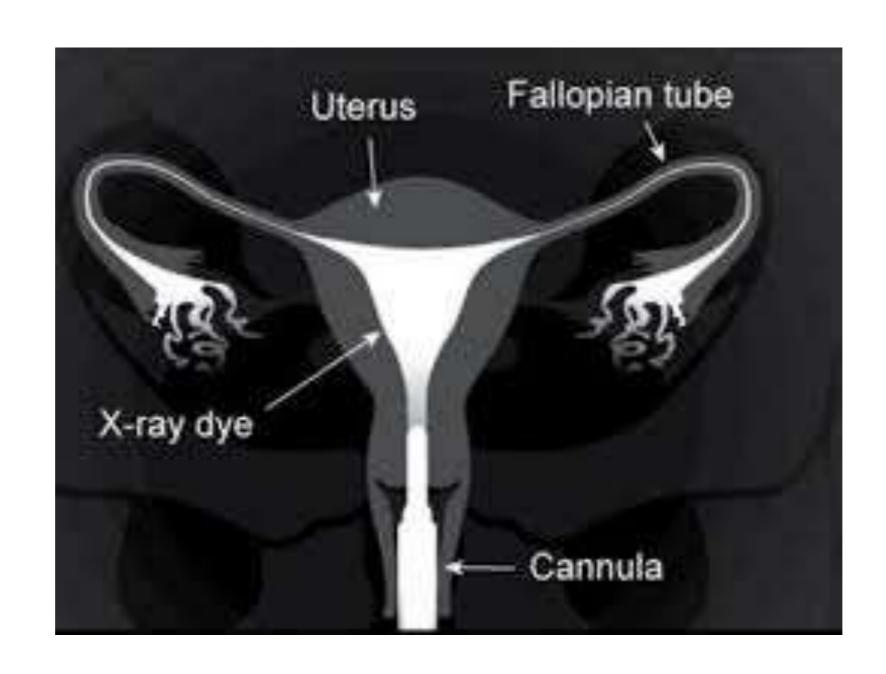






# FILLING OF CONTRAST MEDIA







### FILMING

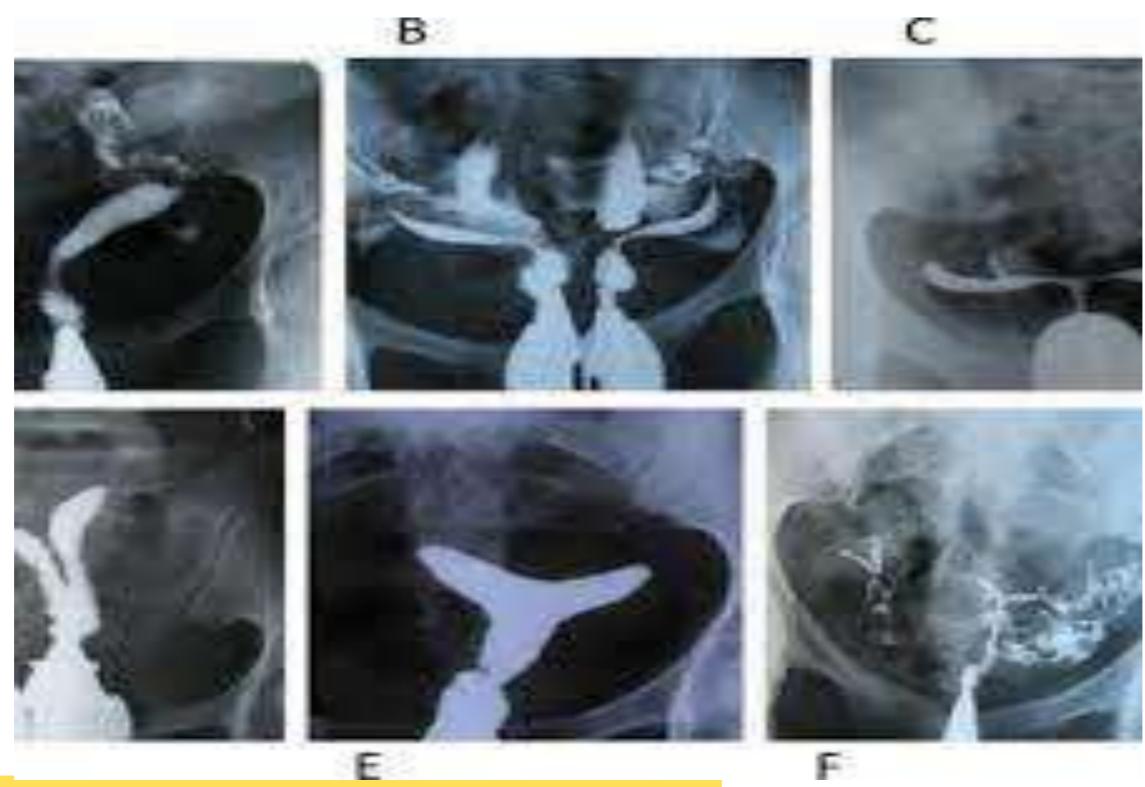


Subsequently four images are taken at timed intervals to demonstrate the dye outlining the interior of the uterus, the filling of the fallopian tubes, and the potential spilling of the dye into the peritoneal cavity through the open or fimbrial end of each tube











# AFTER CARE



- It must be ensured that patient is in no serious discomfort before she leaves.
- She must be cautioned that there may be mild bleeding per vagina for 1-2 days.
- For mild pain analgesics may be given.





# **COMPLICATIONS**



- Pain (because of dilatation of uterus, spillage into peritoneum).
- Infection(pelvic).
- Bleeding.
- Vascular or lympahtic intravasation.
- Vasovagal episode.
- Pregnancy irradiation.
- Allergic reaction(to iodinated contrast media).
- Uterine perforation.













# THANK YOU