Saline Infusion Sonohysterography (SIS) Protocol

Indications

- Evaluation of abnormal uterine bleeding
- Suspected endometrial polyp, submucosal fibroid, or adhesions
- Infertility workup (cavity assessment)
- Congenital uterine anomalies

Preparation

- Schedule in **proliferative phase** of cycle (days 5–10) when endometrium is thin.
- Obtain **pregnancy test** if indicated.
- Consider **prophylactic antibiotics** in patients at risk for pelvic infection.
- Explain procedure and obtain informed consent.
- Patient empties bladder before study.

Equipment

- Endovaginal ultrasound probe with sterile cover
- Sterile speculum and forceps
- Catheter (5–7 Fr balloon catheter or flexible insemination catheter)
- 10–20 mL sterile saline (room temperature)
- Optional: Doppler or 3D acquisition for enhanced evaluation

Procedure

1. Baseline Transvaginal US

o Assess uterus, endometrium, adnexa before infusion.

2. Catheter Placement

- o Place speculum, cleanse cervix with antiseptic.
- o Introduce catheter through cervix into uterine cavity.
- If using balloon catheter, inflate with 1–2 mL sterile saline to secure (optional).
- o Remove speculum, insert transvaginal probe alongside catheter.

3. Saline Infusion

- O Slowly instill 5–20 mL sterile saline in increments.
- Observe cavity distention and outline of endometrium.
- Evaluate for polyps, fibroids, adhesions, or anomalies.

4. Documentation

- o Record images in multiple planes with and without saline distention.
- o Measure endometrium, lesions, or cavity distortion.
- Consider 3D reconstruction if available.

5. Completion

- o Remove catheter and probe.
- o Briefly rescan uterus/adnexa for free fluid or complications.