COMPLICATIONS OF HYSTEROSCOPY

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Classification

- 1-Distention media related
- 2-Mechanical
- 3-Electrocautery
- 4-Anesthesia
- 5-Late

Complications of diagnostic hysteroscopy

- The incidence of serious complications in diagnostic hysteroscopy are very low at 0.012%. Problems include:
- failed procedure (<2%) – could be due to cervical stenosis, creation of a false passage, bleeding or gas bubbles
- problems due to distension media – very rare in diagnostic hysteroscopy
- problems due to the procedure itself:
  - infection
  - bleeding
  - cervical laceration/uterine perforation
- anesthetic problems.

Complications of operative hysteroscopy

- Immediate and early complications:
  - uterine perforation
  - fluid overload
  - hemorrhage
  - infection
  - cervical trauma
  - air embolism
  - electrosurgical burn.
- Late complications:
  - intrauterine adhesions
  - uterine rupture (after metroplasty)
  - haematometra (after endometrial ablation)
  - postablation sterilisation syndrome (after endometrial ablation)
  - pregnancy complications (after endometrial ablation).

categories

- Patient Positioning
- Anesthesia
- Access to the uterine cavity: cervical trauma, perforations
- Distention medium
- Perforations: uterus, adjacent structures
- Bleeding
- Electrosurgery
- Infections
- Late complications

Mechanical Complications

- 1-Cervical Lacerations:

risk factors:

nulliparity, menopause, cervical hypoplasia

Prevention: preoperative preparation of cervix:
misoprostol,estrogen

vasopressin

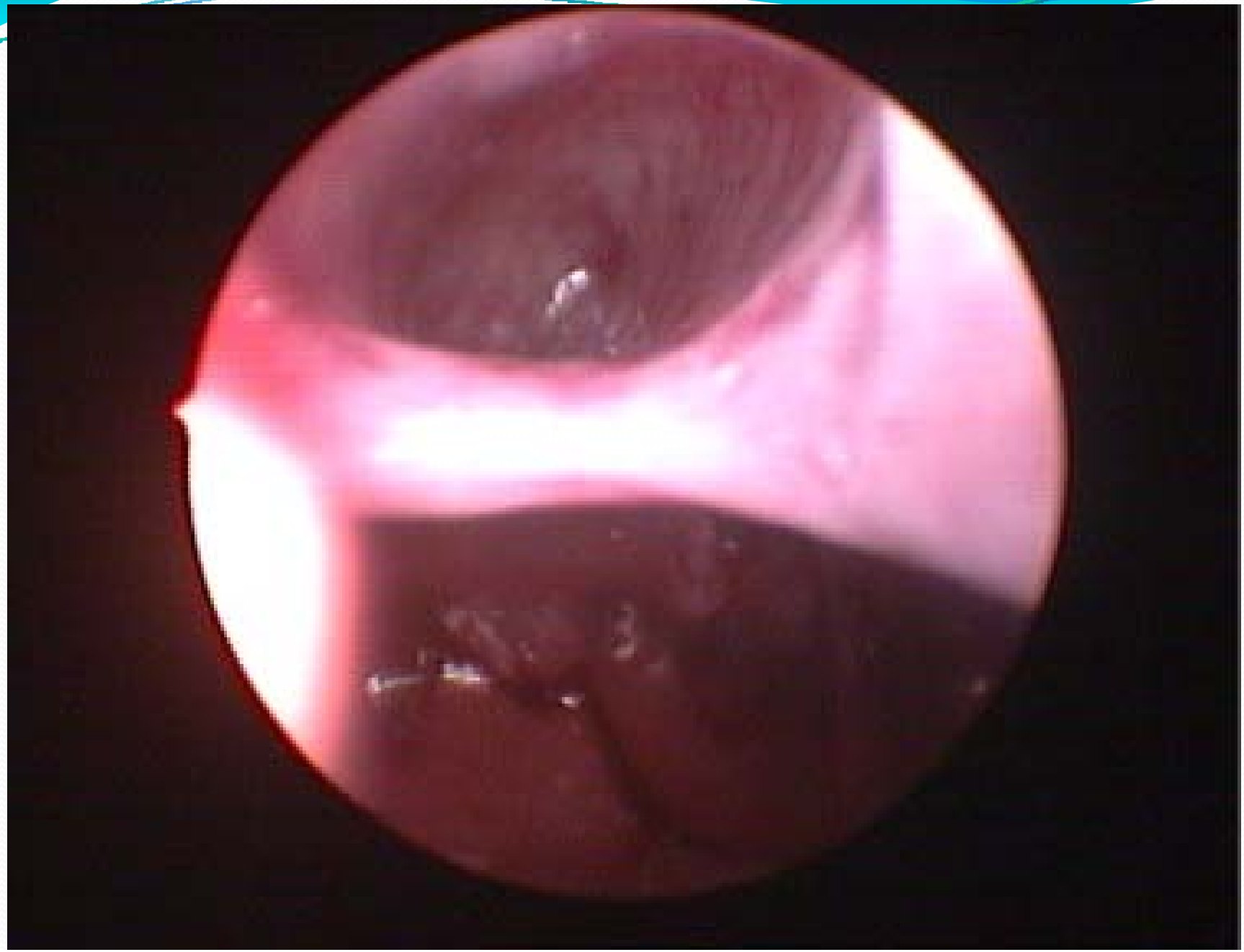
scissors under direct vision

2- Endometrial lesions and false passage

- Occurs during dilation of cervix
- Risk factors: menopause, stenosed cervix, acute ante or retroversion
- Signs: difficult dilation, bleeding
- Tx: usually conservative
- prevention: cervical dilatation, fluid pressure dilation, under direct vision

Cervical trauma

- The risk of cervical trauma can be minimised by:
- implementing a no touch technique whenever possible
- avoiding over traction on the tenaculum or volcellum
- careful gradual dilatation of the cervix
- cervical priming, which might be required in the minority of cases, e.g. postmenopausal or cervical stenosis (by using misoprostol).
- Usually self limiting, cervical trauma may need pressure or diathermy to control. Suturing may be required in rare circumstances.



3- Uterine Perforation

- Occur during

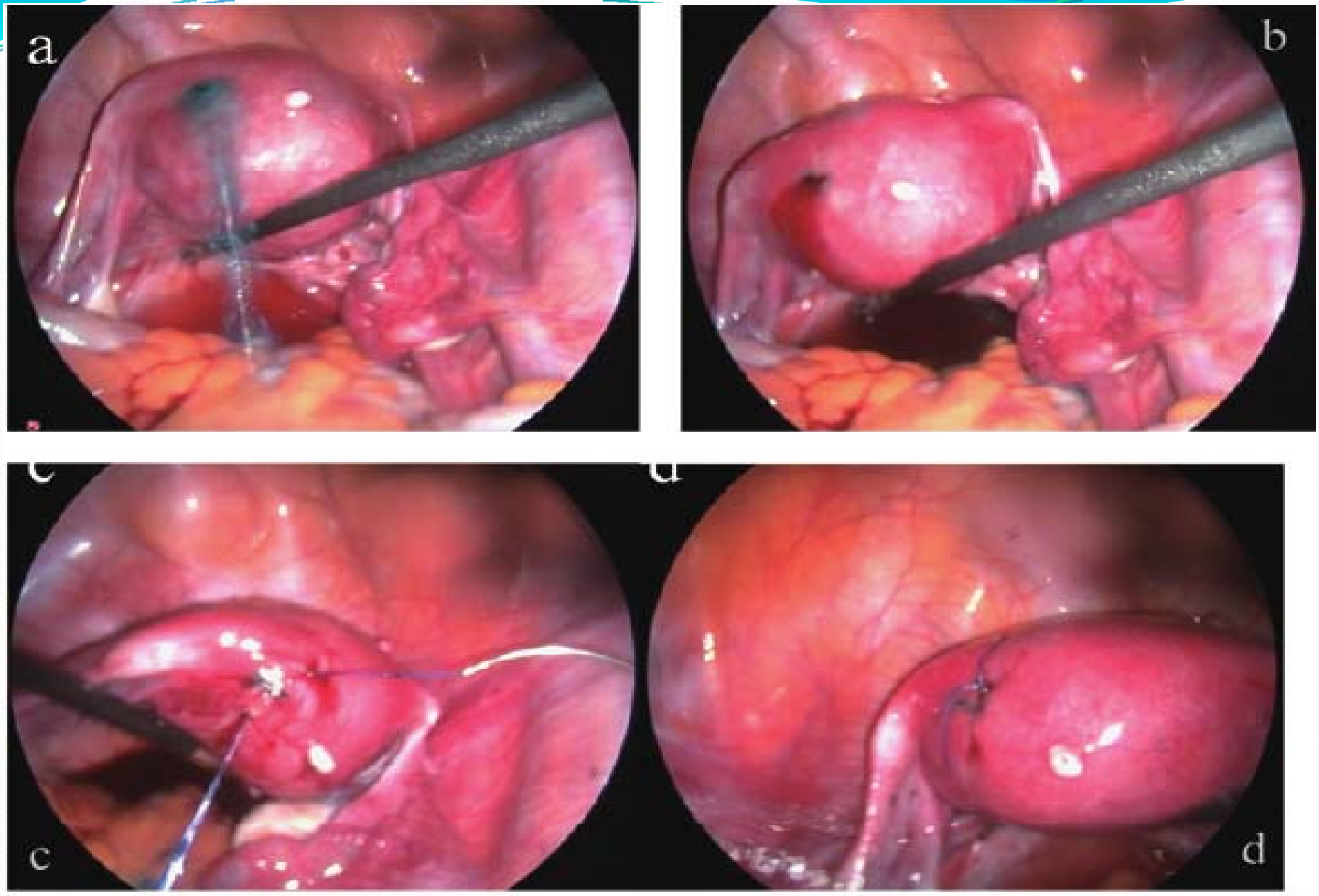
dilation of cervix, inserting hysteroscope and procedure

- risk factors: acute ante or retroversion,

Cervical stenosis, uterine synechia, endometrial malignancy, uterine malformation

Dx: Sudden loss of distention, intestinal loops or omentum is seen

Tx: stop the procedure, expectant or laparoscopy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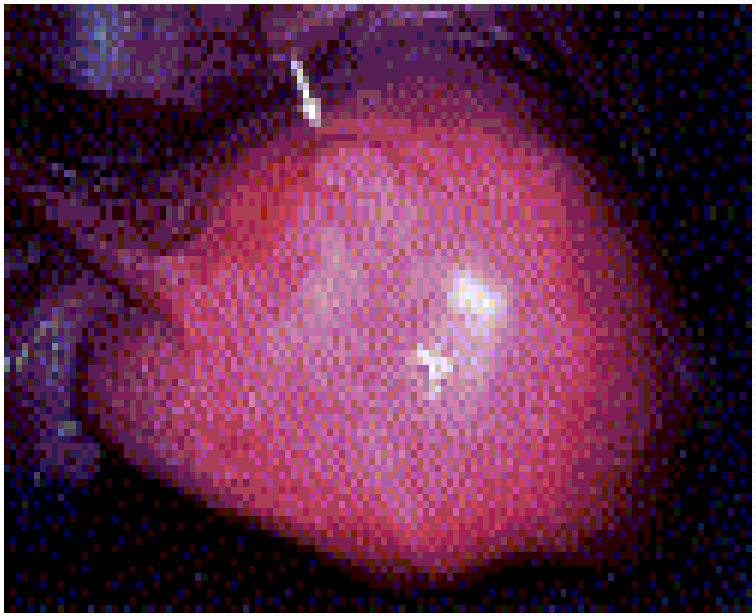

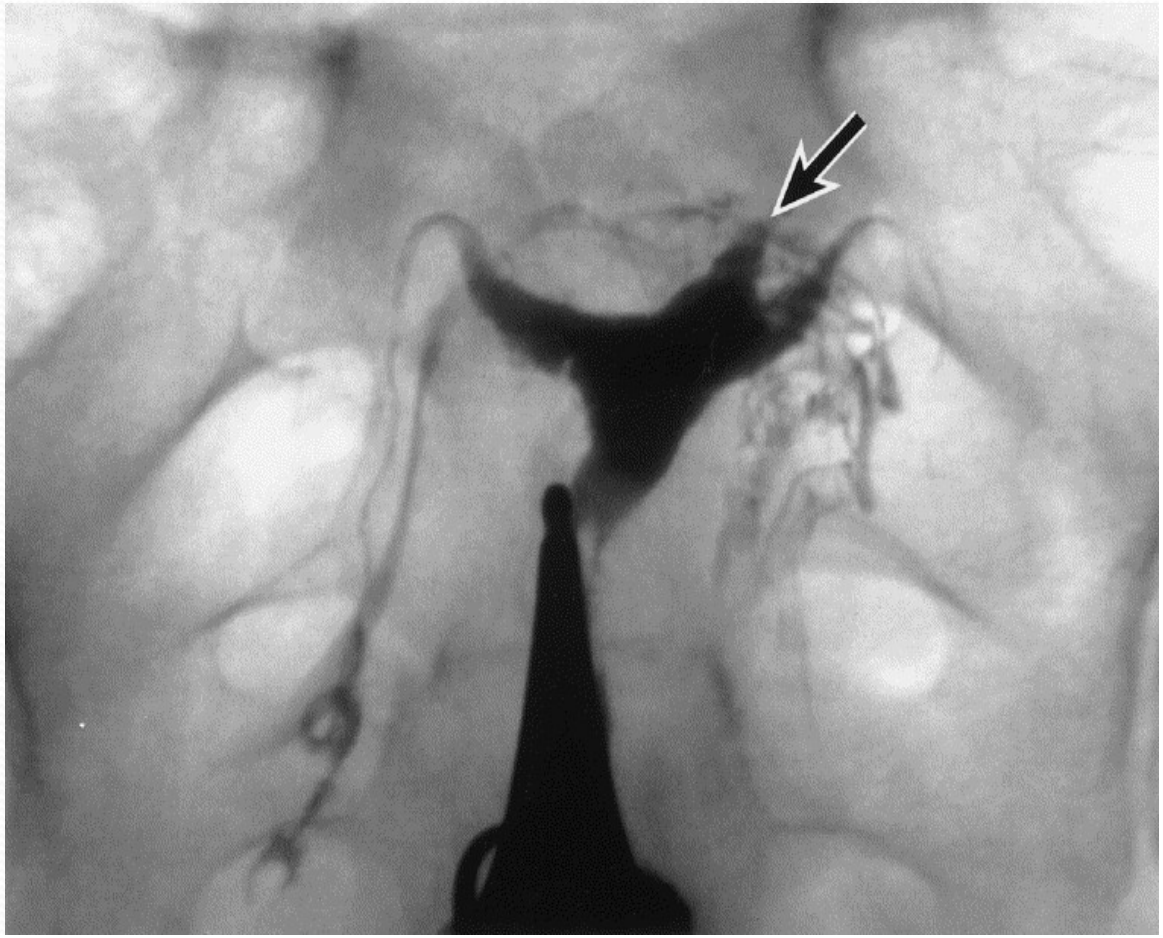

Uterine perforation at hysteroscopy

- This can be encountered at the times indicated below.
- **During cervical dilatation:**
- stop dilating the cervix if in doubt
- direct visualisation of the endocervical and uterine cavities
- discontinue the procedure
- observe overnight and cover with broad spectrum IV antibiotics
- discharge if stable after advising the patient to come back if unwell, in pain or if pyrexial as symptoms may not present until as late as two weeks post procedure.
- **During surgery:**
- discontinue the procedure
- May require a laparoscopy/laparotomy to exclude intra-abdominal injury depending on the instrument used. Laparoscopy is recommended for all perforations using electrosurgical instruments or where avulsion may have occured. It should also be performed for perforations which occur close to the internal cervical os or in the lateral walls of the uterus as these pose a higher risk of bleeding.
- **During retrieval of tissue:**
- laparoscopy for assessment with potential laparoscopic suturing of perforation site
- observe as above.