

IUD issues in clinical practice

Dr Amy Moten



Terminology

In this presentation, terms are used as follows:

IUD = Intrauterine Device, covering both LNG-IUDs and copper-IUDs

LNG-IUD = a type of intrauterine device releasing levonorgestrel

Cu-IUD = a type of intrauterine device containing copper



IUD malposition

Correct position of an IUD:

- fundally placed with arms fully extended
- vertical portion extending straight downward

Malpositioned IUDs may be:

- located in the lower uterine segment or cervix
- rotated
- embedded in the myometrium
- partially expelled
- protruding through the serosa or within the uterine cavity

IUD malposition

Most common presentation is pain or bleeding

Concerns regarding risk of pregnancy

Removal may be unnecessary

Increased risk associated with replacement

Pregnancy associated with discontinuation of contraception

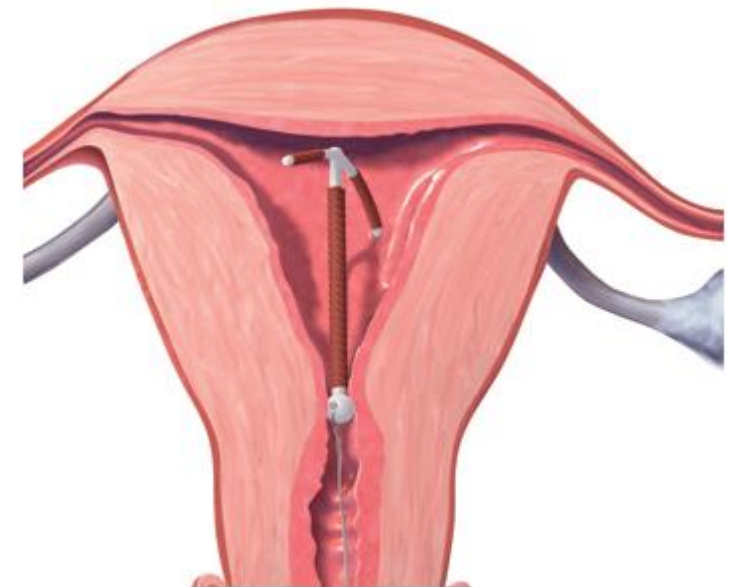


FIGURE 2 Rotated IUD

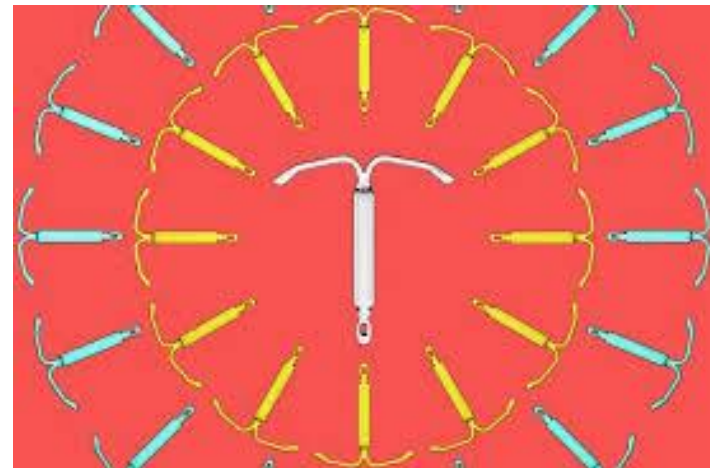
Low lying IUD

>20mm below the uterine fundus

Cu-IUD vs LNG-IUD

May reposition over time

No association with increased bleeding or pain



Low lying IUD

Intracervical IUDs recommended to be removed and replaced

Decreased efficacy particularly Cu-IUD

LNG-IUD intracervically may cause irregular bleeding

Expulsion risk is higher



Embedded IUDs

Penetration into the superficial layers of the myometrium

Impingement on the endometrium causing pressure necrosis of underlying tissue

Trauma may occur when removal of an embedded device is attempted

Partial expulsion

IUD sits in the cervix and the tip extends through the external os

High rate of expulsion

Can present as a change in bleeding pattern with LNG-IUD

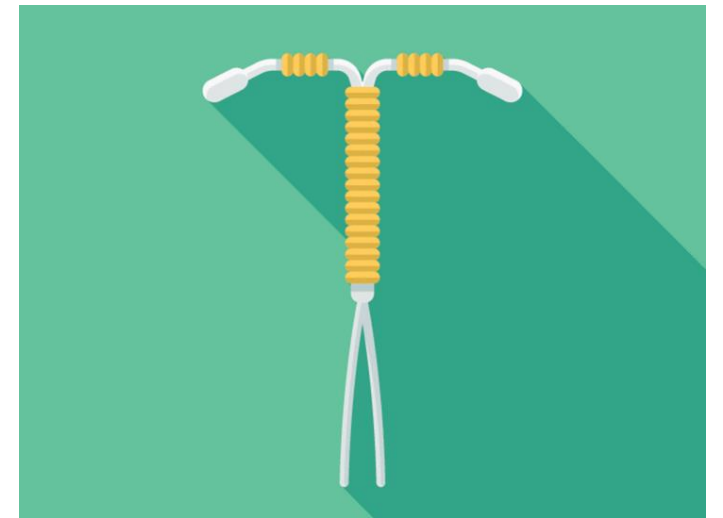
Should be removed and alternative contraception organised

IUD perforation

Protruding through the serosa (partial)

Or completely outside the uterus and within the abdominal cavity (complete)

An embedded IUD may lead to further perforation – the “wandering IUD”

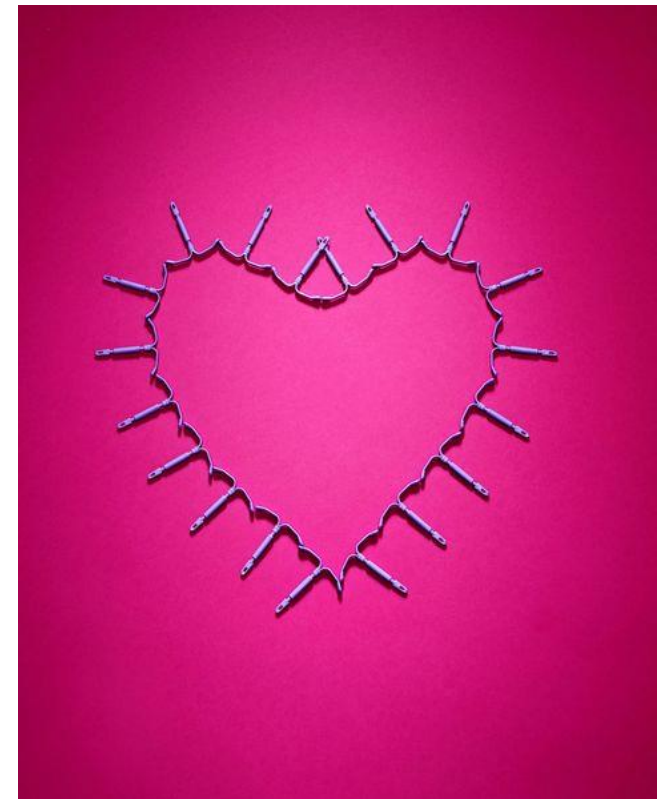


IUD migration

Rare but does occur

Case 1:

- 44yo para 2 was fitted for an LNG-IUD
- Routine speculum exams – strings seen
- Strings not seen at next cervical screen
- IUD found attached to the rectus sheath



IUD migration

Case 2:

- 46yo para 1 long time user of DMPA
- Multiple co-morbidities
- LNG-IUD inserted to 11cm after sounding
- USS post procedure confirmed correct position
- Subsequent repeat CT scans
- 26 months post insertion CT scan showed device had perforated

On review CT scan at 3 weeks post insertion suggested embedded IUD

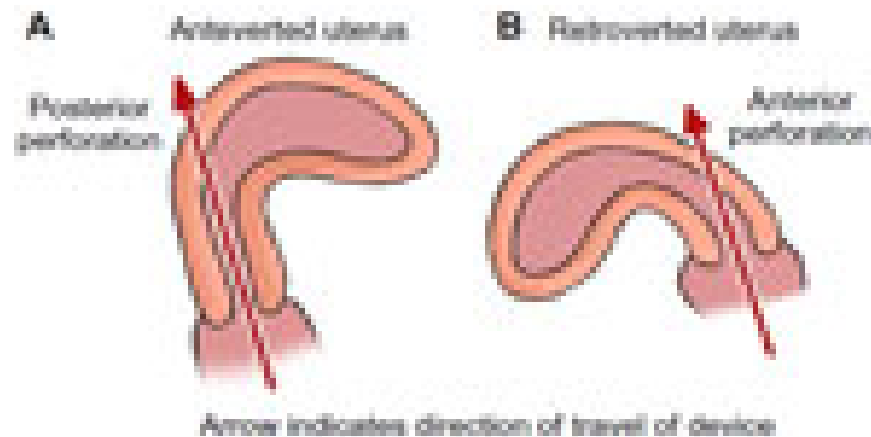
IUD perforation

Risk is 1-2.3/1000 insertion

Breastfeeding and 36 months post partum

No difference between LNG-IUD and Cu-IUD

Number of insertions performed by inserter



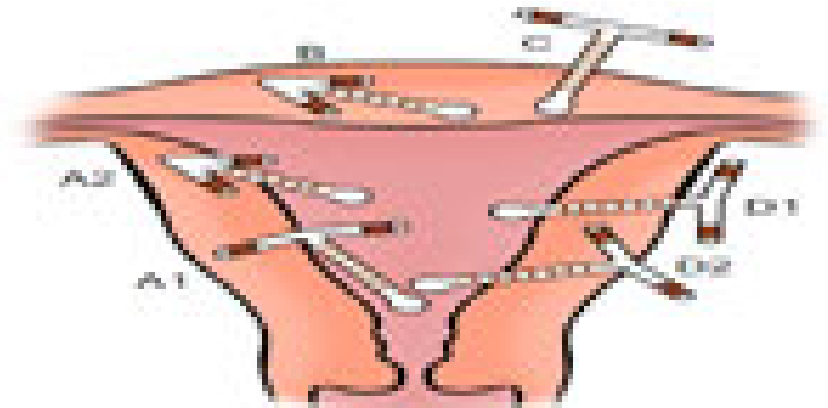
Mechanism

Perforation with sound at time of insertion

Perforation with device at the time of insertion

May be completely painless

The most common location for a complete perforation is the pouch of Douglas



Management of perforation

If perforation with the sound is suspected:

- Ultrasound
- Monitor haemodynamic status and bleeding
- ?Antibiotic cover indicated
- Potential re-insertion ?6 weeks

Management of perforation

Management of suspected perforation with IUD:

- USS/AXR to locate IUD
- Haemodynamically stable/pain controlled
- ?Antibiotic cover
- Laparoscopic removal



Complications of perforation

Serous complications are rare

1 case of haemorrhage leading to hysterectomy reported in the media

Some reports of bowel perforation

Infertility

Adhesions

Some debate regarding the need to remove at all

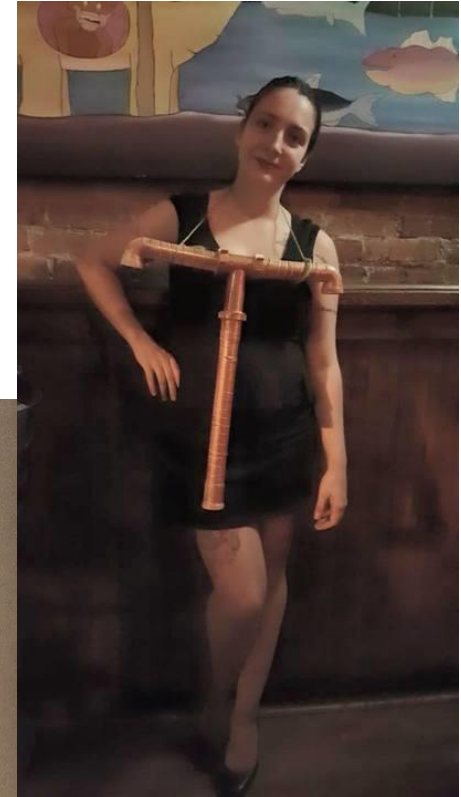
Malposition - recommendations

If symptomatic with pain or bleeding – remove and replace

Asymptomatic patients with a malpositioned LNG-IUD still within the uterine cavity can be counselled regarding the efficacy and remove and replace if desired

Asymptomatic patients with a malpositioned Cu-IUD should be counselled regarding increased risk of pregnancy

Embedded IUDs increased the risk of perforation and should be removed



References

1. Contraception: An Australian Clinical Practice Handbook, 4th Ed
2. UK Faculty of Sexual and Reproductive Health Care <https://www.fsrh.org>
3. Malpositioned IUDs: When you should intervene (and when you should not) *OBG Manag.* 2012 August;24(8):38-46
4. Intrauterine devices and risk of uterine perforation: current perspectives. *Open Access J Contracept.* 2016;7:19–32. Published 2016 Mar 16. doi:10.2147/OAJC.S85546
5. Uterine perforation caused by intrauterine devices: clinical course and treatment. *Hum Reprod.* 2013 Jun;28(6):1546-51. doi: 10.1093/humrep/det074. Epub 2013 Mar 22.
6. Perforation risk and intra-uterine devices: results of the EURAS-IUD 5-year extension study. *Eur J Contracept Reprod Health Care.* 2017 Dec;22(6):424-428. doi: 10.1080/13625187.2017.1412427. Epub 2018 Jan 11
7. Up To Date www.uptodate.com