Guideline

Intrauterine Devices

1. Purpose

This guideline outlines the requirements at the women's for clinicians undertaking a clinical assessment of a women's request for an IUD.

2. Definitions

ALO: actinomyces like organism

STI: sexually transmissible infections

PID: pelvic inflammatory disease

IUD: intrauterine device

IUCD: intra uterine system

IUCD: intrauterine contraceptive device

TB: tuberculosis

PCR: polymerase chain reaction

GA: general anaesthetic.

3. Responsibilities

The Medical Practitioner is responsible for appropriate assessment and application of the intra uterine devices including insertion and removal.

4. Guideline

4.1 Benefits of IUDS

- effective long term contraception good continuation rates:
  - Mirena®: 5 years
  - TT380® Standard: 10 years
  - Multiload® copper 375: 5 years
  - Load 375: 5 years.
- cheap
- "low maintenance": minimal effort required once inserted
- prompt return of fertility.

4.2 Risks of IUDS

- insertion problems - pain, misplacement, perforation
- expulsion - most likely in first 3 months
- cramping & bleeding
- PID - Increased around time of insertion (up to two weeks post insertion)/no of sexual partners
- pregnancy complications if IUD in situ.

4.3 Contraindications

Absolute

- current cervicitis/PID (Chlamydia, gonorrhoea, mycoplasma genitalium, pelvic TB)
- known/suspected pregnancy

- undiagnosed vaginal bleeding
- Cu allergy, Wilson's Disease (for Cu IUD's)
- Current breast cancer, endometrial & cervical cancer, malignant trophoblastic disease (Mirena)
- See Breast Cancer and Contraception Management Guidelines.

Relative

- risk of STI's
- uterine congenital anomalies, fibroids (especially if submucosal/distorting cavity)
- menorrhagia, dysmenorrhoea (Cu IUD's)
- anaemia (Cu IUD's)
- valvular heart disease may require antibiotic cover at time of insertion
- bleeding disorders/anticoagulation
- untreated cervical dysplasia
- severe liver disease (Mirena)
- cavity length >9cm/<5cm.

4.4 Choice of IUD

- CuT380 recommended - 10 year duration, failure rate 0.4/100women years use
- Multiload Cu 375 available if preferred - 5 years duration), failure rate similar to CuT380
- Mirena (levonorgestrel containing IUD) - 5 year duration, failure 0.3/100women/year, associated with significant reduction in menstrual loss after 5-6 months but short term menstrual irregularity.

IUDs of all types are available to hospital patients at a standard prescription charge - discount for health care card holders.

4.5 Insertion prerequisites, timing and procedure

Prerequisites

- Sexual history to identify risk of sexually transmitted infection:
  - pelvic examination to exclude pelvic pathology
  - current Pap smear result
  - swabs (refer to table below).
- Assess the cervix for presence of potential problems for insertion such as scarring
- Assess the women's suitability for IUD insertion in clinic
- GA for insertion can be arranged if preferred
- Consideration should be given on clinical grounds and local population prevalence to screening in addition for Neisseria gonorrhoea and other STIs. Swabs should be correctly labelled re site and tests specifically requested
- If swabs recently taken elsewhere results to be recorded in history
- Swabs collected on day of insertion to be followed up by Choices Resident as soon as available.

New IUD	• High vaginal swab for smear – screen for bacterial vaginosis • Endocervcial swabs or first void urine for chlamydia and Mycoplasma genitalium PCR
IUD	• As above plus

changeover	• Endocervical swabs for microscopy and culture including actinomyces culture

Assessment of suitability for same day insertion/ Risk of pregnancy

- Requires careful sexual and contraceptive history
- WHO and FSRH Guidelines
  - No sexual intercourse since the start of the last normal menstrual period (LNMP)
  - Consistent and correct use of a reliable method of contraception
  - Within 5 days of the start of a normal period
  - Is within 5 days post-abortion or post miscarriage.
- Care to be taken to ascertain correct condom usage for example
- If pregnancy can be excluded insertion may be considered at any time in the menstrual cycle.

Misoprostol

- Evidence with regard to the efficacy of misoprostol for improving insertion rate is equivocal
- Use of misoprostol is associated with significant side effects such as abdominal pain and diarrhoea
- Requires minimum four hours pre dosing which is often not practicable
- Misoprostol must not be used if there is a risk of pregnancy.

Premedication with misoprostol may be considered after careful counselling for:

- Nulliparous women
- Women with deliveries by Caesarean section
- Women with a history of cervical surgery.

The dose is 400mcg (2x200mcg tablets).

Procedure

The following may be considered for pain relief:

- Buscopan/Ponstan usually minimal discomfort
- Lignocaine as spray or for intracervical injection is available in the clinic
  - Insertion takes 5 – 10 minutes but visit will involve approx. 1-2 hours for pre-insertion assessment, preparation and post insertion observation, plus any waiting time
  - Consider uss in clinic post procedure if concern re perforation or placement
  - GA can be arranged if preferred / or unsuccessful clinic insertion (not same day)
  - Letter to be sent to LMO.

Follow up visit (can be done by LMO)

- Approximately six weeks
- Exclude infection, perforation or expulsion
- Women with excessive pain or bleeding or significant change in the thread length may require USS to assess position
- Assess effect on menses, other symptoms
- Check if patient able to feel strings
- Examination to check IUD strings visible and shaft not palpable.

Subsequent visits, encourage LMO visits as first option:

- As needed for symptoms
- 2 yearly as part of a well woman's check with Pap smear and actinomyces culture

Instruct woman to report early with the following:

- Abnormal pain and bleeding or
- If pregnant
- If can no longer feel the IUD string
- New medical condition that might represent a contraindication, eg cancer of the breast with mirena in situ.

4.6 Management of abnormal screening swabs

Detection of a STI, such as chlamydia, Mycoplasma genitalium or gonorrhoea, would indicate treatment of the patient and partner. Contact tracing if appropriate.

Detection of BV on smear requires antibiotic therapy. Further, detection of a significant growth of other vaginal or bowel commensal organisms particularly with a large number of pus cells requires antibiotic therapy.

4.7 IUD Potential Problems

Missing strings

These can sometimes be retrieved by probing the endocervix with a cytobrush. If unable to locate string, then check presence of IUD on ultrasound – NB recommend alternative contraception until presence of IUD confirmed.

If IUD placement is confirmed, it can be left till routine IUD change required. Several IUD string removers are available in the clinic.

If US does not locate IUD, Xray pelvis and abdo – if intra-abdominal, laparoscopic removal is usually required. Discuss with Consultant.

Actinomyces

Actinomyces like organisms (ALO) reported on Pap smear should be confirmed on culture before IUD removal in an asymptomatic woman. Smear results have a high false positive rate for ALO. If culture is negative no further action is required.

If actinomyces is found on routine swab culture in an asymptomatic woman, the IUD should be removed with penicillin prophylaxis. An IUD may be reinserted 2-3/12 later when swabs are negative. Ensure alternative contraception is arranged.

Anitbiotic therapy (high dose penicillin) is indicated if the patient is symptomatic, suggestive of upper genital tract infection eg endometiritis, PID.

Symptoms of abnormal pain and bleeding

If severe PID is present (tenderness, fever, and discharge at os) remove the IUD immediately and commence antibiotic therapy. Cervical swabs for micro and culture plus PCR to exclude chlamydia, Mycoplasma genitalium, gonorrhoea and actinomyces. In mild to moderate PID, the IUD may be left in place and treatment commenced. If the woman is not responding to treatment the IUD should be removed.

If the diagnosis is uncertain consider leaving the IUD in place, taking swabs, +/- antibiotic therapy and arranging early review.

Pregnancy

Discuss with the patient regarding their wishes for the pregnancy continuation or termination.

Ultrasound examination to confirm site of IUD, site the pregnancy and viability.

If a pregnancy is confirmed and the IUD is accessible remove it to reduce the risk of spontaneous abortion and later infection. If not accessible warn patient of risk of miscarriage, symptoms and signs of infection prior to

formulating a plan of management. Discuss with Unit Consultant.

5. Evaluation, monitoring and reporting of compliance to this guideline

Compliance to this guideline will be monitored, evaluated and reported through annual review of incidents.

6. References

1. FSHR UK medical Eligibility criteria for contraceptive use http://www.fsh.org/pdfs/UKMEC2009.pdf.
2. Royal College of Obstetricians and Gynaecologists (RCOG), Faculty of Sexual and Reproductive Healthcare, Clinical Effectiveness Unit provide regular updates on all methods available at: www.fsrh.org.
3. Sexual Health and family Planning Australia (SH & FPA) "Time for a Change : Increasing the use of Long Acting Reversible Contraceptive Methods In Australia ." October 2013.
4. Sexual Health and Family Planning Australia, Contraception: an Australian Clinical Practice Handbook, 3nd Ed, 2012 (contact FPV [03] 9257 0100).
5. World Health Organisation (WHO), Medical Eligibility Criteria for Contraceptive Use. 4th edition 2010 http://www.who.int/reproductivehealth/pblication/family_planning/9789241563888/en/index.html.
6. Bahomondes,L. Mansour,D. Fiala,C Kaunitz,M. Gemzell-Danielsson, K. "Practical advice for avoidance of pain associated with insertion of intrauterine contraceptives." Journal of Family Planning and Reproductive Health Care 2013; 0:pp1-7.

7. Legislation/Regulations related to this guideline

Not applicable.

8. Appendices

Appendix 1: Contraception - Your choices

Appendix 2: Intra Uterine Device (IUD)