INTERRAOTERINE CONTRACEPTIVE DEVICE (COPPER)

Introduction

All intrauterine devices (IUDs) (except gynefix) available on the UK market consist of copper (Cu) wire or sleeves around an inert core of plastic or polypropylene. All are radiopaque and contain copper.

The primary mode of action is believed to be by inhibition of fertilisation due to direct toxicity on sperm and oocytes.

- An inflammatory reaction within the endometrium may have an anti-implantation effect should fertilisation occur.
- Alterations in the copper content of cervical mucus is seen which may inhibit sperm penetration.

Indications for IUD Use

- This method is suitable for any women, of child-bearing age, who is not pregnant and wishes to minimise the possibility of pregnancy and who has no contra-indications to its use.
- Women requiring emergency contraception (see Emergency Contraception Protocol).

Eligibility criteria for IUD Use

See Appendix 1. The UK Medical Eligibility criteria for both the copper intrauterine device (Cu-IUD) and levonorgestrel intrauterine system (LNG-IUS/Mirena) have been included as this may assist with client assessment and counselling.

Efficacy and choice of device

Failure rate is low with cumulative pregnancy rates 0.1-1% after 1 year of use (Cu >300mm²). Banded devices are those with additional bands of copper on the horizontal arms and these give the highest efficacy and in general offer the longest duration of action, which minimises the established risks associated with reinserterion.

For example the banded TT 380 Slimline and T-Safe 380A Quickload each last 10 years and these are devices of first choice. However for individual clients width of insertor and length of device may also have to be considered. Women should be given information on the device inserted and its licensed duration to avoid unnecessary early removal. This information should also be documented in the case notes.
<table>
<thead>
<tr>
<th>Device</th>
<th>Cu Surface Area (mm²)</th>
<th>Licensed duration of use (years)</th>
<th>Recommended utero-cervical length (cm)</th>
<th>Diameter of insertion tube (mm)</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banded</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper T 380 A®</td>
<td>380</td>
<td>10</td>
<td>6.5-9.0</td>
<td>4.75</td>
<td>£8.95</td>
</tr>
<tr>
<td>TT380 Slimline®</td>
<td>380</td>
<td>10</td>
<td>6.5-9.0</td>
<td>4.75</td>
<td>£12.46</td>
</tr>
<tr>
<td>Stem Only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nova-T 380®</td>
<td>380</td>
<td>5</td>
<td>6.5-9.0</td>
<td>3.60</td>
<td>£15.20</td>
</tr>
<tr>
<td>UT 380®</td>
<td>380</td>
<td>5</td>
<td>6.5-9.0</td>
<td>3.60</td>
<td>£11.22</td>
</tr>
<tr>
<td>UT 380 short®</td>
<td>380</td>
<td>≥5</td>
<td></td>
<td>3.60</td>
<td>£11.22</td>
</tr>
</tbody>
</table>

**Benefits**

- **Non-hormonal method**
- **Use of Cu-IUD may be associated with a reduced risk of endometrial and cervical cancer.**
- **Use as emergency contraception.**

**Side Effects/Risks**

- An increase in the risk of pelvic infection occurs within the 20 days following IUD insertion but the risk is the same as the non-IUD using population thereafter.
- Displacement or expulsion is the commonest cause of IUD failure. The risk of this happening is around 1 in 20 and is most common in the first year of use, particularly within three months of insertion. There is a small increased risk of expulsion in the nulliparous.
- The risk of uterine or cervical perforation associated with an IUD is up to 2 per 1000 insertions and is approximately six-fold higher in breast-feeding women.
- The overall risk of ectopic pregnancy is reduced with IUD use compared to using no contraception. The annual ectopic pregnancy rate for IUD is 0.02 per 100 women years, compared to 0.3 to 0.5 per 100 women years for those not using contraception. Similar rates for ectopic pregnancy are reported for LNG IUS and IUD. Alternative methods of contraception, which inhibit ovulation, will however reduce the risk of ectopic pregnancy to a greater degree.
- If a pregnancy does occur with an intrauterine method in situ, the risk of an ectopic pregnancy occurring is increased and in some studies half of the pregnancies that occurred were ectopic.
- Women should be informed about symptoms of ectopic pregnancy and the possibility of ectopic pregnancy should be considered in women with an intrauterine method who present with abdominal pain especially in connection with missed periods or if an amenorrhoeic woman starts bleeding. If a pregnancy test is positive an ultrasound scan is urgently required to locate the pregnancy.
- Altered menstrual bleeding patterns (including spotting, light bleeding, heavy or longer menstrual periods) are common in the first 3-6 months and persist in a minority of women. Unacceptable bleeding is one of the most common reasons for requesting IUD removal. Discontinuation rates are similar for both framed and frameless devices. Women should be advised to seek medical advice, to exclude infection and gynaecological pathology if menstrual abnormalities persist beyond the initial 6 months of use.
- Dysmenorrhoea is a common reason for requesting IUD removal.
- Allergy to copper.
- Cu-IUD users with recurrent bacterial vaginosis (BV) or vulvo-vaginal candida (VVC) may wish to consider an alternative method of contraception.

**Assessment Of Client Suitability**

- Accurate information is the key to user acceptability.
- Clinical history taking and examination allow an assessment of medical eligibility for IUD use. In this context the history should include: relevant social, medical, sexual (to assess risk of sexually transmitted infections – STIs), family and drug history as well as details of reproductive health and previous contraceptive use.
- With this information clinicians can advise on the appropriate contraceptive options taking account of both medical and social factors.
- Women considering an IUD should be counselled regarding other contraceptive options including the two alternative levonorgestrel releasing intrauterine systems (IUS).
- Counselling should include a discussion about discomfort during/or after IUD insertion and possible side effects and risks. Use the counselling proforma included in appendix. Once we have done that we can tick the box on Nash which says "counselling as per pro forma".
- STI risk assessment should be performed for all women considering an IUD. A NAAT test for *Chlamydia trachomatis* and *Neisseria gonorrhoea* should be undertaken in women at higher risk of STIs (age < 25 years or if they are 25 years or older and they have a new sexual partner or more than one sexual partner in last year, or if their regular partner has other sexual partners). Testing for *Chlamydia trachomatis* and *Neisseria gonorrhoea* should also be done in women who request it.
- Women who are at higher risk of STIs should be advised to use condoms in addition to the IUD.
- Client should be given written information on the method.

**Documentation**

- The patient record should be completed or updated as required.
- Name of chaperone should be recorded.
- Details of the insertion procedure including the name, batch number and expiry date of the IUD inserted should be recorded.
- Details of local anaesthetic used, if any including batch number and expiry date should be recorded.
- Written method information given to patient including name of device, expected date of removal, change or review and contact number in case of problems. It is desirable to record the date of removal, change or review in the patient record.
- A standard letter will automatically be generated by Sandyford IT department and sent to the client’s GP informing them of the procedure, provided GP permission is recorded on NaSH.

The Timing of Insertion of an IUD as a long-term contraception

<table>
<thead>
<tr>
<th>Circumstances when an IUD can be inserted</th>
<th>Insertion Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>In all circumstances</td>
<td>Any time in the menstrual cycle if is reasonably certain the woman is not pregnant or at risk of pregnancy (unless qualifies for use as emergency contraception* (EC)). It is effective immediately.</td>
</tr>
<tr>
<td>Post partum (including post Caesarean section and breastfeeding)</td>
<td>Any time ≥ 4 weeks postpartum and it is reasonably certain the women is not pregnant or at risk of pregnancy (unless qualifies for use as EC)*. It is effective immediately.</td>
</tr>
<tr>
<td>Following abortion</td>
<td>Post surgical abortion: IUD should ideally be inserted at the end of the procedure for immediate contraceptive effect. Post medical abortion: IUD can be fitted any time after completion of the second part of the abortion (i.e. passage of products of conception confirmed by clinical assessment and/or local protocols). It is effective immediately.</td>
</tr>
<tr>
<td>Following administration of emergency hormonal contraception</td>
<td>*Within the first 5 days (120hours) following first UPSI in a cycle or within 5 days from the earliest estimated date of ovulation. Outside the above criteria, IUDs should NOT be inserted until pregnancy can be excluded by a pregnancy test at least 3 weeks after UPSI.</td>
</tr>
<tr>
<td>Switching from another method of contraception</td>
<td>An IUD can be inserted at any time if another method of contraception has been used consistently and correctly. Insert at any time if it is reasonably certain that the woman is not pregnant. There is no need to wait for the next period or withdrawal bleed.</td>
</tr>
</tbody>
</table>

A provider can be reasonably certain a woman is not pregnant if she has no symptoms or signs of pregnancy and meets any of the following criteria:
- Has not had intercourse since last normal menses
- Has been correctly and consistent using a reliable method of contraception
- Is within the first 7 days after normal menses
- Is within the first 7 days post-abortion or miscarriage
- Is fully or nearly fully breast feeding, amenorrhoeic, and less than 6 months postpartum
- She is within 4 weeks post partum for non lactating women

Insertion & Removal Techniques

- Clinicians who insert IUDs should be appropriately trained, maintain competence and attend regular updates in dealing with emergencies in accordance with Faculty and/or RCN guidelines.
- Informed verbal consent should be given by women prior to insertion and this should be recorded on NaSH.
• STI risk assessment should have been done when assessing client suitability and a sexual health screen offered.

• Women with symptomatic pelvic infection should be tested, treated and insertion delayed until symptoms resolve. A bridging contraceptive method should be offered if necessary. Women diagnosed with an STI or PID should be advised to abstain from intercourse until they and any current sexual partner(s) have finished treatment or for one week after treatment with single dose azithromycin.

• In asymptomatic women attending for insertion of an IUD there is no need to wait for STI screening results or to provide antibiotic prophylaxis providing the woman can be contacted and treated promptly in the event of a positive result.

• Asymptomatic chlamydia infection should preferably be treated before insertion. In certain circumstances it maybe acceptable to treat at the time of insertion.

• Screening for asymptomatic chlamydia/gonorrhoea should be considered when inserting an emergency post coital IUD. There is no indication to screen for other lower genital tract organisms in asymptomatic women considering IUC. If bacterial vaginosis or candidal infection is diagnosed or suspected the infection should be treated and the method inserted without delay. There is no reason to delay insertion.

• Antibiotic prophylaxis against infective endocarditis is no longer recommended to women including those with previous endocarditis or prosthetic heart valves undergoing procedures in the genitourinary tract. Any episodes of infection in people at risk of infective endocarditis should, in liaison with other relevant specialists be investigated and treated promptly to reduce the risk of endocarditis developing. The following conditions place patients at risk:
  - acquired valvular heart disease with stenosis or regurgitation
  - valve replacement
  - some forms of structural congenital heart disease (see NICE Clinical Guidance 64 for more details)
  - previous infective endocarditis
  - hypertrophic cardiomyopathy

• An appropriately trained assistant should be present during IUD insertion to help in the event of an emergency.

• Emergency equipment must be available in all settings where IUDs are inserted and local protocols must be in place for patients requiring further medical input.

• Pulse rate and blood pressure should be assessed and documented when clinically appropriate.

• A bimanual pelvic examination should be performed before inserting an IUD.

• Local anaesthetic techniques (lignocaine gel or injection of local anaesthetic to the cervix) may be used and should ideally be available and offered to all women.

• Local anaesthetic block administered by cervical injection is not routinely required for IUD insertion but should be offered when cervical dilation is required or difficult IUD insertion or removal is anticipated / experienced.

• Those who have epilepsy, are likely to require local anaesthetic or who have had a previous failed insertion at another clinic should be referred to a clinic with more experienced staff specialising in difficult IUD insertions.

• For women with cardiac disease the decision to use IUD should involve a cardiologist. The IUD should be fitted in a hospital setting if a vasovagal reaction presents a
particularly high risk, for example, women with single ventricle circulation, Eisenmenger’s physiology, tachycardia or pre-existing bradycardia.

- A ‘no-touch’ technique should be used when sounding the uterine cavity and inserting an IUD.
- The use of a tenaculum is recommended to stabilise the cervix and straighten the uterocervical axis. It should be applied slowly to allow the cervical fibres to displace.
- An assessment should be made of the length of the uterine cavity.

**Advice following Insertion**

Insertion of an IUD may cause pain and discomfort for a few hours and women should be informed about appropriate pain relief.

Women should be informed about how to check for the presence of IUD threads and encouraged to do this regularly with the aim of recognising expulsion.

Women should be informed of the symptoms of pelvic infection (for example pain, dyspareunia, abnormal discharge and fever) and advised as to how and where to seek medical help if these occur particularly in the first three – four weeks after insertion. In addition, women should be advised to seek medical assistance at any time if they develop symptoms of pain, persistent menstrual abnormalities, missed periods, cannot palpate their threads or can feel the stem of the intra-uterine device. Women who are concerned that the device may have been expelled should be advised to use another method of contraception or abstain from intercourse until medical review. Consideration may also have to be given to the use of emergency hormonal contraception.

MRI Scans: Some radiology department’s policy includes IUD removal prior to a MRI scan. The FSRH CEU suggests that IUD removal is not required when a static magnetic field up to 3 Tesla is used – patients should contact their local radiology dept when they receive their appointment and ask whether their coil needs removal...

Mooncups/Tampons: Moon Cup® manufactures recommend waiting for 6 weeks post IUD insertion prior to use. They do not appear to be associated with an increase in IUD expulsion.

**Follow-Up**

First visit post fitting would normally be at six weeks to exclude infection, perforation or expulsion. The women can make a booked return (20 minute) appointment. Consideration may be given to earlier review if the IUD was inserted for emergency contraception.

After the initial check women should be asked to return if they develop problems or wish the device to be removed or changed. In addition she should inform her smear taker at the time of cervical screening that she has an IUD in place so they may check that the threads are still visible.

**Removal without reinsertion**

Women who wish to conceive can have their IUD removed at any time. Pre-pregnancy advice should be offered regarding lifestyle, diet, folic acid, rubella immunity and vitamin D.

Women should be advised that if they wish to have an IUD removed and avoid pregnancy they should abstain or use another method of contraception for at least 7 days before removal.
If removal is considered essential, the patient is beyond the first three days of menstruation and another method of contraception has not been used in the previous 7 days then consideration should be given to the use of hormonal emergency contraception. This may also have to be considered if a device is being removed after partial expulsion.

**Change of IUD**

Women should be advised to use condoms or abstain from sexual intercourse for 7 days prior to the change in case a new IUD cannot be inserted immediately.

**Extended use of an IUD**

After counselling about declining fertility, contraceptive efficacy and risks associated with IUD insertion (infection, perforation, expulsion) women who have an IUD with $\geq 300\text{mm of } Cu$ inserted at age $\geq 40$ years can retain the device until it is no longer needed after the menopause. If the last menstrual period occurs in a woman over 50 years of age, the Cu IUD should be retained for a further year. If the last menstrual period occurs in a woman under 50 years of age, the Cu IUD should be retained for a further 2 years. Women should be informed that extended use is outside the product license.
### Problems Associated with IUD usage

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspected perforation at time of insertion</td>
<td>The procedure should be stopped and vital signs (blood pressure and pulse rate) and level of discomfort monitored until stable. An ultrasound scan and/or plain abdominal X-ray to locate the device if it has been left in situ should be arranged as soon as possible.</td>
</tr>
<tr>
<td>Lost threads</td>
<td>See flow chart.</td>
</tr>
<tr>
<td>Abnormal bleeding</td>
<td>Gynaecological pathology and infections should be excluded if abnormal bleeding persists beyond the first 6 months following insertion of intrauterine contraception. Clinicians should also be aware that abnormal bleeding at any time may indicate the presence of an STI or gynaecological pathology and when appropriate women should be investigated accordingly. Non-steroidal inflammatory drugs can be used to treat spotting, light bleeding, heavy or prolonged menstruation. In addition antifibrinolytics (such as tranexamic acid) may be used for heavy or prolonged menstruation. Women who find heavier bleeding associated with IUD use unacceptable may consider changing to a levonorgestrel intrauterine system.</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>Most pregnancies in women using an IUD will be intrauterine but an ectopic pregnancy must be excluded. See flow chart to determine whether attempt should be made at IUD removal and on going management.</td>
</tr>
<tr>
<td>Suspected pelvic infection</td>
<td>For women using an IUD with symptoms and signs suggestive of pelvic infection appropriate antibiotics should be started. There is no need to remove the IUD unless symptoms fail to resolve within the following 72 hours or unless the woman wishes removal. All women with confirmed or suspected PID should be followed up to ensure: resolution of symptoms and signs, their partner has also been treated when appropriate, completion of the course of antibiotics, STI risk assessment, counselling regarding safer sex and partner notification.</td>
</tr>
<tr>
<td>Presence of actinomyces-like organisms (ALO)</td>
<td>IUD users with ALO detected on a smear who have no symptoms should be advised there is no reason to remove the IUD unless signs and symptoms of infection occur. There is no indication for follow-up screening. If symptoms of pelvic pain occur women should be advised to seek medical advice. Other causes of infection (in particular STIs) should also be considered and it may be appropriate to remove the IUD.</td>
</tr>
</tbody>
</table>
Management of a pregnancy in a woman using intrauterine contraception

History and pregnancy test to confirm pregnancy. The site of the pregnancy should be determined by ultrasound.

Explain possible increased risk of second trimester miscarriage, preterm delivery and infection if the IUS is left in situ. Removal would reduce adverse outcomes but is associated with a small risk of miscarriage.

Examination

Threads visible

< 12 weeks gestation

Remove device in clinic if able to do so with gentle traction after discussion with client

Pregnancy management

Threads not visible

> 12 weeks gestation

Pregnancy management

If no evidence that the device was expelled prior to pregnancy it should be sought at delivery and if not identified a plain abdominal X-Ray should be arranged to determine if the device is extra-uterine
Management Of Lost Intra-uterine Device (IUD) Threads

No IUD threads visible

Exclude pregnancy

Exploration of the cervical canal with narrow artery forceps or thread retriever

Threads not located. Recommend alternative contraception until confirmation of device

Threads located; no further action or remove and replace if suspected malposition

Ultrasound scan

Device not seen in uterus

X-ray to localise if device is in pelvis or abdominal cavity. Request on NaSH.

Device identified: Laparoscopy to remove device if in abdominal cavity. Laparotomy may rarely be required if the device is firmly adherent to the surrounding tissue

Device NOT identified: If no device is seen on x-ray, this confirms expulsion. Arrange reinsertion or alternative contraception.

Device correctly located in uterus; leave in situ until due to be removed

Use thread retriever or may require hysteroscopy to remove device when required
## Appendix 1: IUC counselling pro forma

<table>
<thead>
<tr>
<th></th>
<th>IUS</th>
<th>IUD</th>
<th>JAYDESS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FAILURE RATE IN 5 YEARS</strong></td>
<td>&lt;1%</td>
<td>&lt;2%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>PID</td>
<td>1:200 IN FIRST 90 DAYS</td>
<td>1:200 IN FIRST 90 DAYS</td>
<td>1:200 IN THE FIRST 90 DAYS</td>
</tr>
<tr>
<td>EXPULSION</td>
<td>1:20 IN FIRST 3 MONTHS</td>
<td>1:20 IN FIRST 3 MONTHS</td>
<td>1:20 IN THE 3 YEARS</td>
</tr>
<tr>
<td>ECTOPIC PREGNANCIES (IF PREGNANCY OCCURS )</td>
<td>1:2</td>
<td>1:2</td>
<td>1:2</td>
</tr>
<tr>
<td>PERFORATION</td>
<td>2:1000 MORE COMMON IN &lt;6 WEEKS POSTPARTUM</td>
<td>2:1000 MORE COMMON IN &lt;6 WEEKS POSTPARTUM</td>
<td>2:1000 MORE COMMON IN &lt;6 WEEKS POSTPARTUM</td>
</tr>
<tr>
<td>OVARIAN CYSTS</td>
<td>1:100 BUT CLINICALLY NOT SIGNIFICANT</td>
<td>NO DIFFERENT FROM GENERAL POPULATION</td>
<td>FEWER THAN WITH IUS</td>
</tr>
<tr>
<td>MENSTRUAL CHANGES</td>
<td>3-6 MONTHS</td>
<td>3-6 MONTHS</td>
<td>3-6 MONTHS LESS CHANCES OF AMENORRHOEA</td>
</tr>
<tr>
<td>ACNE</td>
<td>NO CHANGES</td>
<td>NO CHANGES</td>
<td>NO CHANGES</td>
</tr>
<tr>
<td>WEIGHT GAIN</td>
<td>POSSIBLE</td>
<td>POSSIBLE</td>
<td>POSSIBLE</td>
</tr>
<tr>
<td>RETURN TO FERTILITY</td>
<td>ON DEVICE REMOVAL</td>
<td>ON DEVICE REMOVAL</td>
<td>ON DEVICE REMOVAL</td>
</tr>
</tbody>
</table>

### Procedure
- Describe procedure
- Discuss options for PAIN RELIEF.
- 50% of women experience minimal/no pain
- Women sometimes experience "FAINT LIKE " feeling
- Describe positioning methods to minimize the feeling

### Post procedure
- ADDITIONAL PRECAUTIONS discussed
- Discuss and demonstrate THREAD CHECKING
- POST INSERTION CHECK IN 3-6 WEEKS IF UNABLE TO FEEL THE THREADS.
- Patient information leaflet given

### Checklist
- Discuss information as per evidence based chart
- Discuss procedure
- Discuss post procedure management /follow up
Appendix 2: UK Medical Eligibility Criteria for Intrauterine Contraception (2009)

<table>
<thead>
<tr>
<th>UKMEC CATEGORY</th>
<th>DEFINITION OF CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATEGORY 1</td>
<td>A condition for which there is no restriction for the use of the contraceptive method</td>
</tr>
<tr>
<td>CATEGORY 2</td>
<td>A condition where the advantages of using the method generally outweigh the theoretical or proven risks</td>
</tr>
<tr>
<td>CATEGORY 3</td>
<td>A condition where the theoretical or proven risks usually outweigh the advantages of using the method. The provision of a method requires expert clinical judgement and/or referral to a specialist contraceptive provider, since the use of the method is not usually recommended unless other more appropriate methods are not available or not acceptable</td>
</tr>
<tr>
<td>CATEGORY 4</td>
<td>A condition which represents an unacceptable health risk if the contraceptive method is used</td>
</tr>
</tbody>
</table>

**Initiation (I)**
Starting a method of contraception in a woman with a specific medical condition

**Continuation (C)**
Continuing the method already being used by a woman who develops a new medical condition.

<table>
<thead>
<tr>
<th>Condition</th>
<th>UKMEC CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cu-IUD</td>
</tr>
</tbody>
</table>

### Personal characteristics & reproductive history

<table>
<thead>
<tr>
<th>PREGNANCY</th>
<th>4</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Menarche to &lt;20</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>b) &gt;20</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PARITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Nulliparous</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>b) Parous</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>POSTPARTUM (breastfeeding or non-breastfeeding, including post caesarian section) This includes all deliveries including stillbirth from 24 weeks gestation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) 48 hours to &lt; 4 weeks</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>b) &gt;4 weeks</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>c) Puerperal sepsis</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>POST ABORTION This includes all induced or spontaneous abortions &lt; 24 weeks gestation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) First trimester</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>b) Second trimester</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>c) Immediate post septic abortion</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>PAST ECTOPIC PREGNANCY</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>HISTORY OF PELVIC SURGERY</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SMOKING</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>OBESITY</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>UKMECT CATEGORY</td>
<td>Cu-IUD</td>
<td>LNG-IUS</td>
</tr>
<tr>
<td>------------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Initiation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuation</td>
<td></td>
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</tr>
</tbody>
</table>

### Cardiovascular disease

**MULTIPLE RISK FACTORS FOR ARTERIAL CARDIOVASCULAR DISEASE (such as older age, smoking, diabetes, hypertension and obesity)**

1 | 2

#### HYPERTENSION

- **a)** Adequately controlled hypertension
- **b)** Consistently elevated blood pressure levels
- **c)** Vascular disease (includes coronary heart disease presenting with angina; peripheral vascular disease presenting with intermittent claudication; hypertensive retinopathy, and transient ischaemic attacks)

1 | 2

#### HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY

1 | 1

#### VENOUS THROMBO-EMBOLISM (VTE) (including deep vein thrombosis and pulmonary embolism)

- **a)** History of VTE
- **b)** Current VTE (on anticoagulants) Women who have a current VTE may consider the use of the CU-IUD or LNG-IUS but should perhaps consider delaying insertion until anticoagulants have stopped, due to the potential risk of bleeding during the insertion procedure
- **c)** Family history of VTE
- **d)** Major surgery
  - i. with prolonged immobilisation
  - ii. without prolonged immobilisation
- **e)** Minor surgery without immobilisation
- **f)** Immobility (unrelated to surgery) eg: wheelchair use, debilitating illness

1 | 2

#### KNOWN THROMBOGENIC MUTATIONS (eg: Factor V Leiden; Prothrombin mutation; Protein S, Protein C and Antithrombin deficiencies)

1 | 2

#### CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE

(If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation. There is no need to remove the IIU method before evaluation)

1 | 2 | 3

#### STROKE (history of cerebrovascular accident including TIA)

1 | 2 | 3

#### VALVULAR AND CONGENITAL HEART DISEASE

- **a)** Uncomplicated
- **b)** Complicated (pulmonary hypertension, atrial fibrillation, a history of subacute bacterial endocarditis)

1 | 1 | 2

### Neurological conditions

**HEADACHES**

- **a)** Non-migrainous (mild or severe)
- **b)** Migraine without aura at any age
- **c)** Migraine with aura at any age
- **d)** Past history (> 5 yrs ago) of migraine with aura, at any age

1 | 1 | 2

**EPILEPSY** (see section on drug interactions)

1 | 1

### Breast and Reproductive Tract Infections and Disorders

#### VAGINAL BLEEDING PATTERNS

- **a)** Irregular pattern without heavy bleeding
- **b)** Heavy or prolonged bleeding (includes regular and irregular patterns). Unusually heavy bleeding should raise the suspicion of a serious underlying condition.

1 | 1 | 1 | 2

#### UNEXPLAINED VAGINAL BLEEDING (suspicious for serious underlying condition)

Before evaluation (If pregnancy or an underlying pathological condition (such as pelvic malignancy) is suspected, it must be evaluated and the category adjusted after evaluation. There is no need to remove the IIU method before evaluation)

1 | C | 1 | 2

**ENDOMETRIOSIS** (A Cu-IUD IUD may worsen dysmenorrhea associated with endometriosis)

2 | 1

**BENIGN OVARIAN TUMOURS** (including cysts)

1 | 1
<table>
<thead>
<tr>
<th>UKMEC CATEGORY</th>
<th>Cu-IUD</th>
<th>LNG-IUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I = Initiation</td>
<td></td>
<td></td>
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<tr>
<td>C = Continuation</td>
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</tbody>
</table>

**SEVERE DYSMENORRHOEA** (Dysmenorrhea may intensify with Cu-IUD use, the LNG-IUS has been associated with a reduction)
- **Cu-IUD**: 2
- **LNG-IUS**: 1

**GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTD)** (includes hydatidiform mole, invasive mole, placental site trophoblastic tumour)
- **a)** Decreasing or undetectable β-hCG levels
  - **Cu-IUD**: 1
  - **LNG-IUS**: 1
- **b)** Persistently elevated β-hCG levels or malignant disease (Avoid use due to the possible risks of perforation and irregular bleeding)
  - **Cu-IUD**: 4
  - **LNG-IUS**: 4

**CERVICAL ECTROPION**
- **Cu-IUD**: 1
- **LNG-IUS**: 1

**CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN)**
- **Cu-IUD**: 1
- **LNG-IUS**: 1

**CERVICAL CANCER** (awaiting treatment) There is concern about the increase risk of infection and bleeding at insertion
- **Cu-IUD**: 4
- **LNG-IUS**: 4

**BREAST DISEASE**
- **a)** Undiagnosed mass
  - **Cu-IUD**: 1
  - **LNG-IUS**: 2
- **b)** Benign breast disease
  - **Cu-IUD**: 1
  - **LNG-IUS**: 1
- **c)** Family history of cancer
  - **Cu-IUD**: 1
  - **LNG-IUS**: 1
- **d)** Carriers of known gene mutations associated with breast cancer (e.g., BRCA1)
  - **Cu-IUD**: 1
  - **LNG-IUS**: 2
- **e)** Breast cancer
  - **I. Current**
    - **Cu-IUD**: 1
    - **LNG-IUS**: 4
  - **II. Past and no evidence of current disease for 5 years**
    - **Cu-IUD**: 1
    - **LNG-IUS**: 3

**ENDOMETRIAL CANCER** (There is concern about the increase risk of infection, perforation and bleeding at insertion.)
- **Cu-IUD**: 3
- **LNG-IUS**: 2

**OVARIAN CANCER**
- **Cu-IUD**: 3
- **LNG-IUS**: 2

**UTERINE FIBROIDS**
- **a)** Without distortion of the uterine cavity
  - **Cu-IUD**: 1
  - **LNG-IUS**: 1
- **b)** With distortion of the uterine cavity
  - **Cu-IUD**: 3
  - **LNG-IUS**: 3

**ANATOMICAL ABNORMALITIES**
- **a)** Distorted uterine cavity (any congenital or acquired uterine abnormality distorting the uterine cavity in a manner that is incompatible with insertion)
  - **Cu-IUD**: 3
  - **LNG-IUS**: 3
- **b)** Other abnormalities (including cervical stenosis or cervical lacerations) not distorting the uterine cavity or interfering with insertion
  - **Cu-IUD**: 2
  - **LNG-IUS**: 2

**PELVIC INFLAMMATORY DISEASE**
- **I. Current**
  - **Cu-IUD**: 1
  - **LNG-IUS**: 1
- **II. Past PID (assuming no known current risk factors for STIs)**
  - **Cu-IUD**: 1
  - **LNG-IUS**: 1
- **b)** PID – current
  - **Cu-IUD**: 4
  - **LNG-IUS**: 2

**SEXUALLY TRANSMITTED INFECTIONS (STIs)**
- **a)** Chlamydia infection
  - **I. Symptomatic**
    - **Cu-IUD**: 4
    - **LNG-IUS**: 4
  - **II. Asymptomatic**
    - **Cu-IUD**: 4
    - **LNG-IUS**: 2
- **b)** Current purulent cervicitis or gonorrhoea
  - **Cu-IUD**: 4
  - **LNG-IUS**: 2
- **c)** Other STIs excluding HIV and hepatitis
  - **Cu-IUD**: 2
  - **LNG-IUS**: 2
- **d)** Vaginitis (including trichomonas vaginalis and bacterial vaginosis)
  - **Cu-IUD**: 2
  - **LNG-IUS**: 2
- **e)** Increased risk of STIs
  - **Cu-IUD**: 2/3
  - **LNG-IUS**: 2/3

**HIV/AIDS**

**HIGH RISK OF HIV**
- **Cu-IUD**: 2
- **LNG-IUS**: 2

**HIV INFECTED**
- **a)** Not using anti-retroviral therapy
  - **Cu-IUD**: 2
  - **LNG-IUS**: 2
- **b)** Using anti-retroviral therapy (see section on drug interactions)
  - **Cu-IUD**: 2-2/3
  - **LNG-IUS**: 2-2/3

**AIDS excluding those clinically well on anti-retroviral therapy** (intrauterine contraceptive users with AIDS should be closely monitored for pelvic infection)
- **Cu-IUD**: 1
- **LNG-IUS**: 1

**AIDS but clinically well on anti-retroviral therapy** (intrauterine contraceptive users with AIDS should be closely monitored for pelvic infection and see section on drug interactions)
- **Cu-IUD**: 2
- **LNG-IUS**: 2

*Taken from WHOMECEC 2009 following discussion with Clinical Effectiveness Unit*
### Other Infections

**SCHISTOSOMIASIS**
- a) Uncomplicated
  - IUD
  - Cu-IUD
- b) Fibrosis of liver (if severe, see cirrhosis)
  - IUD
  - Cu-IUD

**TUBERCULOSIS** (see section on drug interactions)
- a) Non-pelvic
  - IUD
  - Cu-IUD
- b) Known pelvic
  - IUD
  - Cu-IUD

**MALARIA**

### Endocrine Conditions

**DIABETES**
- a) History of gestational disease
  - IUD
  - Cu-IUD
- b) Non-vascular disease
  - I. non insulin dependent
    - IUD
    - Cu-IUD
  - II. insulin dependent
    - IUD
    - Cu-IUD
- c) Nephropathy/retinopathy/neuropathy
  - IUD
  - Cu-IUD
- d) Other vascular disease
  - IUD
  - Cu-IUD

**THYROID DISORDERS** (simple goitre, hyperthyroid, hypothyroid)
- IUD
  - Cu-IUD

### Gastrointestinal Conditions

**GALL BLADDER DISEASE**
- a) Symptomatic
  - I. treated by cholecystectomy
    - IUD
    - Cu-IUD
  - II. medically treated
    - IUD
    - Cu-IUD
  - III. current
    - IUD
    - Cu-IUD
- b) Asymptomatic
  - IUD
  - Cu-IUD

**HISTORY OF CHOLESTASIS**
- a) Pregnancy-related
  - IUD
  - Cu-IUD
- b) Past COC-related
  - IUD
  - Cu-IUD

**VIRAL HEPATITIS**
- a) Acute or flare
  - IUD
  - Cu-IUD
- b) Carrier
  - IUD
  - Cu-IUD
- c) Chronic
  - IUD
  - Cu-IUD

**CIRRHOSIS**
- a) Mild (compensated without complications)
  - IUD
  - Cu-IUD
- b) Severe (decompensated); development of major complications (ascites, jaundice, encephalopathy or gastrointestinal haemorrhage)
  - IUD
  - Cu-IUD

**LIVER TUMOURS**
- a) Benign
  - I. Focal nodular hyperplasia
    - IUD
    - Cu-IUD
  - II. Hepatocellular adenoma
    - IUD
    - Cu-IUD
- b) Malignant (hepatoma)
  - IUD
  - Cu-IUD

**WILSON’S DISEASE**

UKMEC does not include Wilson’s Disease. The CEU state that may be due to lack of evidence and potential toxic effects of copper, the use of a Cu-IUD in a woman with Wilson’s Disease is not recommended.

**INFLAMMATORY BOWEL DISEASE** (includes Crohn’s disease, Ulcerative colitis)
- IUD
  - Cu-IUD
### Stigma

#### Contraception

<table>
<thead>
<tr>
<th>Anemias</th>
<th>Cu-IUD</th>
<th>LNG-IUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thalassaemia</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Sickle Cell Disease</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Iron Deficiency Anaemia</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Raynaud’s Disease</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Primary</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>b) Secondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. without lupus anticoagulant</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>ii. with lupus anticoagulant</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Rheumatic Diseases

**Systemic Lupus Erythematosus (SLE)** People with SLE are at an increased risk of ischaemic heart disease, stroke, and venous thromboembolism. Categories are based on the assumption that no other risk factors for cardiovascular disease are present: these must be modified in the presence of such risk factors.

<table>
<thead>
<tr>
<th></th>
<th>Cu-IUD</th>
<th>LNG-IUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Positive (or unknown) antiphospholipid antibodies</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>b) Severe thrombocytopenia</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>c) Immunosuppressive treatment</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>d) None of the above</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**DRUG INTERACTIONS**

### Antiretroviral Therapy

This section relates to the SAFETY of contraceptive use in women using these antiretrovirals.

<table>
<thead>
<tr>
<th></th>
<th>Cu-IUD</th>
<th>LNG-IUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Nucleoside reverse transcriptase inhibitors</td>
<td>2/3</td>
<td>2</td>
</tr>
<tr>
<td>b) Non-nucleoside reverse transcriptase inhibitors</td>
<td>2/3</td>
<td>2</td>
</tr>
<tr>
<td>c) Ritonavir-boosted protease inhibitors</td>
<td>2/3</td>
<td>2</td>
</tr>
</tbody>
</table>

### Anticonvulsant Therapy

This section relates to the SAFETY of contraceptive use in women using anticonvulsants.

<table>
<thead>
<tr>
<th></th>
<th>Cu-IUD</th>
<th>LNG-IUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Certain anticonvulsants (phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>b) Lamotrigine (lamotrigine concentrations in LNG-IUS users are similar to those in non-hormonal users)</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

### Antimicrobial Therapy

This section relates to the SAFETY of contraceptive use in women using these antimicrobials.

<table>
<thead>
<tr>
<th></th>
<th>Cu-IUD</th>
<th>LNG-IUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Broad spectrum antibiotics</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>b) Antifungals</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>c) Antiparasitics</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>d) Rifampicin or rifabutin therapy</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
References:

Faculty of Sexual and Reproductive Health Care Clinical Effectiveness Unit FSRH Guidance (June 2015) Intrauterine Contraception.
http://www.fsrh.org/pdfs/CEUGuidanceIntrauterineContraception.pdf [accessed 31 08 15]

Faculty of Sexual and Reproductive Health Care Clinical Effectiveness Unit FSRH Guidance (July 2010) Contraception Over 40 Years.

Faculty of Sexual and Reproductive Health. The UK Medical Eligibility Criteria for Contraceptive Use (UKMEC 2009)
Telephone helpline: Flow Chart IUD/IUS Problems

IUD/IUS in situ

Risk of pregnancy

Yes

No

Attend urgent care

Can't feel/can't see threads

Use condoms until attends booked appointment or urgent care ?EC

C/o pain or discharge

Attend urgent care

Menorrhagia

PCB or IMB

Attend booked appointment