## **Hormonal Intrauterine System Contraception Guideline (LNG-IUS)**

#### <u>Page</u>

- 2 What's New
- 2 Introduction
- 2 Efficacy
- 3 Key Difference between Available Devices
- 4 Potential Non-Contraceptive Benefits of LNG-IUS
- 4 Medical Eligibility
- 4 LNG-IUS in Specific Patient Groups
- 5 Side Effects / Risks
- 6 Assessment of Client Suitability
- 7 Situations where it may more appropriate to delay LNG-IUS insertion or give antibiotic prophylaxis
- 8 Timing of Insertion
- 9 The Insertion Procedure
- 9 Interventions that ease LNG-IUS Insertion
- 10 Documentation
- 10 Advice Following Insertion
- 11 Problems Associated with LNG-IUS Use
- 12 Management of a Pregnancy in a Woman using Intrauterine Contraception
- 13 Management of Lost IUS Threads
- 14 Timings of Removal/Replacement of LNG-IUS
- 16 Post-partum contraception guidance
- 19 References

#### **Abbreviations**

IUC Intrauterine Contraception

LNG-IUS Levonorgestrel Intrauterine System

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 1	COPIES AVAILABLE: ww.wossexualhealthmcn.org

#### What's New (significant changes)

FSRH Guidance no longer supports extended use of the IUS that was in place during COVID restrictions.Levosert and Benilexa® now has an intra-uterine system now has a 6-year license for routine contraception.

Mirena IUS now has a 8 year licence for routine contraception.

All 52mg IUS must be changed at 5 years if used for endometrial protection, as part of HRT.

Women can be encouraged to access on line an eight minute film about intrauterine methods of contraception produced by Lothian Sexual Health which is available on line.

New section on managing follow-up for post-partum intrauterine contraception from page 16-18.

#### <u>Introduction</u>

Levonorgestrel intrauterine systems (LNG-IUS) consist of a T-shaped device with an elastomere core which releases levonorgestrel. The contraceptive effects are local as a result of endometrial suppression which prevents implantation and changes to the cervical mucus and utero-tubal fluid, which impairs sperm migration and penetration.

#### **Efficacy**

- The failure rate of LNG-IUS use is very low.
- The pearl index (pregnancies per 100 woman years) is 0.06 for the Mirena®, 0.29 for Kyleena®. and 0.33 for Jaydess®.
- Pregnacy rates for Levosert over first five years of use is similar to published data on Mirena®
- The ectopic pregnancy rate with the 52mg-IUS is reported as 0.02 per 100 women years, 0.08 for the Cu-IUD, 0.11 for Jaydess® and 0.2 for Kyleena®

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 2	COPIES AVAILABLE: www.wossexualhealthmcn.org



## Key Differences between available devices

## The LNG-IUS is not recommended for post-coital use as emergency contraception

	Mirena®	Levosert®/ Benilexa®	Kyleena®	Jaydess®
Levonorgestrel content	52mg	52mg	19.5mg	13.5mg
License duration	8 years	6 years	5 years	3 years
Licensed for Contraception	YES	YES	YES	YES
Licensed for heavy menstrual bleeding	YES	YES	NO	NO
Suppression of ovulation	Up to 25% of women experience suppression of ovulation.			Minimal effect on ovulation
Licensed for endometrial protection	YES (4 years – see below*)	NO	NO	NO
Cost (FSRH)	£88	£66	£76	£69.22
Cost per year over period of license (£/year)	£11	£11	£15.2	£23.02
Colour of threads	Brown	Blue	Blue	Brown
Silver ring for improved visibility on USS	No	No	Y	es
Release rates and serum levels		Similar to Mirena®	Lower tha	n Mirena®
Reduction in menstrual loss and onset of amenorrhoea		Similar to Mirena®	(may appea who prefe more regul patt	han Mirena® al to women r to have a ar bleeding ern)
Frame size and insertion tube	32mm horizontal	minute structural differences to		zontal width tical length

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 3	COPIES AVAILABLE: www.wossexualhealthmcn.org



diameter	width 32mm vertical length 4.4mm insertion	Mirena®  4.8mm insertion tube diameter  Minimum uterine	3.8 mm insertion tube diameter  (maybe a theoretical advantage in terms of ease of fitting and less pain associated with insertion).
	tube diameter	cavity length of 5.5cm	associated with insertion).
Insertion techniques	One-handed technique	Two-handed technique, with a similar introducer to the Nova-T	One-handed technique

.

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 4	COPIES AVAILABLE: www.wossexualhealthmcn.org

#### Potential Non Contraceptive Benefits of the LNG-IUS

**Menorrhagia**: Both Mirena® and Levosert® can reduce menstrual loss by over 90% and can be used as a first line option to treat menorrhagia after appropriate investigation in keeping with local protocols / guidelines for the Management of Heavy Menstrual Bleeding

**Fibroids:** Both Mirena® and Levosert® can be effective in management of menorrhagia even in the presence of fibroids but use is not generally recommended if fibroids are distorting the uterine cavity.

**Dysmenorrhoea** / pelvic pain: Both Mirena® and Levosert® may reduce the pain associated with primary dysmenorrhoea, endometriosis or adenomyosis.

\*Mirena® Use As Progestogen Component Of HRT: Mirena® is licensed in the UK for protection from endometrial hyperplasia during oestrogen replacement therapy for up to 4 years. The FSRH support the use of the Mirena® for up to five years (outside product license for this purpose). Levosert® is not licensed for endometrial protection.

#### **Medical Eligibility**

Hypersensitivity to the active substances or any of the excipients is a contraindication to use of the LNG-IUS. Please see UKMEC

https://www.fsrh.org/documents/ukmec-2016/

#### LNG-IUS use in specific patient groups

- The use of intrauterine methods should not be restricted based on age or parity alone
- Post abortion There is evidence that immediate post abortion insertion reduces the number
  of subsequent unwanted pregnancies and repeated abortions (refer to 'Timing of Insertion').
   Women should be informed of the small increase in the risk of expulsion following immediate
  or early insertion post abortion.
- Cardiac disease The decision to use IUC should involve a cardiologist. The IUC should be
  fitted in hospital setting if a vasovagal reaction presents a particularly high risk for example
  women with a single ventricle, Eisenmenger physiology, tachycardia or pre-existing
  bradycardia. Likewise fitting should also be in hospital setting in women with known long QT
  syndrome since cervical stimulation during insertion can cause a vasovagal reaction with an
  increased risk of a cardiac event.

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 5	COPIES AVAILABLE: www.wossexualhealthmcn.org



- **Immunocompromised** No evidence on the risks of infection due to drugs that affect the immune system.
- **Systemic steroids** If on long term systemic steroids, advice should be sought from the women's physician regarding the need for increased steroid treatment prior to IUC insertion (may be a greater risk of cardiovascular collapse during IUC insertion)
- **Breast cancer** Non hormonal contraception is most appropriate. Any consideration of the LNG-IUS should be carried out in consultation with the a cancer specialist.
- SLE Increased risk of a number of cardiovascular conditions such as ischaemic heart disease, venous thromboemboembolism and stroke. The advantages of LNG-IUS, irrespective of antiphospholipid antibody status, generally outweigh any theoretical or proven risks

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 6	COPIES AVAILABLE: www.wossexualhealthmcn.org

#### Side Effects/Risks

- Mirena®, Levosert®, Kyleena® and Jaydess® have similar side effects profiles (such as acne, breast tenderness/ pain and headache) and hormonal side effects often settle with time. Rates of discontinuation due to side effects are not significantly different from Cu-IUD users.
- Libido Existing evidence fails to support a negative effect.
- Weight gain has been observed with intrauterine contraceptive use but there is no significant difference between hormonal and non-hormonal methods and evidence to support a causal association is lacking

#### Pelvic Infection:

- Studies examining a relationship between intrauterine contraception use and PID are subject to limitations, bias and confounding and good evidence is lacking
- In intrauterine contraception PID appears most strongly related to the insertion procedure and the background risk of STIs.
- A review of a number of studies identified a low rate of PID (1.6 per 100 women years). A six fold increase of PID was reported in the 20 days after insertion. After this time the risk was low unless there was exposure to STIs.
- **Displacement or expulsion** is the commonest cause of intrauterine contraceptive 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.

#### Ectopic Pregnancy:

- The overall risk of ectopic pregnancy is very low with LNG-IUS use because of its very high efficacy in preventing pregnancy
- If pregnancy does occur with an intrauterine method in situ, the risk of an ectopic occurring is increased and in some studies half of pregnancies that occurred were ectopic.
- Further research is required to clarify the ectopic risk for Kyleena® relative to other LNG-IUS but current studies report ectopic pregnancy rate with the 52mg-IUS of 0.02 per 100 women years, 0.08 for the Cu-IUD, 0.11 for Jaydess® and 0.2 for Kyleena®
- Intrauterine contraceptive users should be informed about symptoms of ectopic. The possibility of ectopic pregnancy should be considered in women with an intrauterine method who present with abdominal pain especially in connection with a missed period or if an amenorrhoeic women starts to bleed. If a pregnancy test is positive, an ultrasound scan is urgently required to locate the pregnancy.
- The risk of uterine or cervical perforation associated with intrauterine contraception insertion is less than 2 per 1000 insertions and it is approximately 6 fold higher in breast feeding woman.

#### Bleeding

- o In the first 3-6 months of Mirena® or Levosert® use women may experience irregular, prolonged or frequent bleeding.
- At one year of Mirena® or Levosert® use infrequent bleeding is usual and some women experience amenorrhoea.
- Date from trials suggest Kyleena® and Jaydess® users have a lower rate of amenorrhoea although there is still a trend towards less bleeding with time.

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 7	COPIES AVAILABLE: www.wossexualhealthmcn.org

- Women should be advised to seek medical advice, to exclude infection and gynaecological pathology if menstrual abnormalities (apart from women who develop amenorrhoea or oligomenorrhoea) persist beyond the initial 6 months of use. Likewise a woman who has developed a very acceptable bleeding pattern which then deteriorates should also seek medical advice.
- Benign ovarian cysts may develop whilst using the LNG-IUS, most are asymptomatic and resolve spontaneously.
- Bone mineral density No evidence to suggest effect.
- **Return to fertility** after LNG-IUS use is generally similar to fertility rates after discontinuation of oral contraceptives and barrier methods.
- Enzyme inducers No evidence of reduced efficacy.

#### **Assessment of Client Suitability**

Accurate information and empathic counseling is the key to user acceptability.

Clinical history taking and examination allow an assessment of medical eligibility for LNG-IUS use. In this context the history should include: relevant social, medical, sexual (to assess risk of 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.

Investigations such as a full blood count, pelvic ultrasound and endometrial biopsy may be indicated prior to or at the same time as LNG-IUS insertion in women with heavy menstrual bleeding. Clinicians should be guided by local and national guidelines on the management of heavy menstrual bleeding.

Women can be encouraged to watch an eight minute film produced by Lothian Sexual Health available on line which gives information about intrauterine methods of contraception.

 $\underline{\text{https://www.wossexualhealthmcn.org.uk/west-of-scotland-managed-clinical-network/resources/patient-information-leaflets.htm}$ 

Counseling should include a discussion about discomfort during/or after LNG-IUS insertion and possible benefits, side effects and risks.

STI risk assessment should be performed for all women considering an LNG-IUS andesting 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, a history of STIs, attending as a previous contact of an STI or has alcohol / substance abuse). Testing should also be done in women who request it.

Women with 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 LNG-IUS insertion.

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 8	COPIES AVAILABLE: ww.wossexualhealthmcn.org



## <u>Situations where it may be more appropriate to delay LNG-IUS insertion or give antibiotic prophylaxis.</u>

- Women with symptomatic pelvic infection should be tested, treated and insertion delayed until symptoms resolve.
- Asymptomatic gonorrhoea or chlamydia infection should be treated before insertion. If it is not possible to delay insertion, it may be acceptable to treat asymptomatic chlamydia infection at the time of insertion.
- In asymptomatic women attending for insertion of a LNG-IUS there is no need to wait for STI
  results or routinely provide prophylactic antibiotics provided the women can be contacted
  and treated promptly.
- There is no indication to routinely test for lower genital tract organisms (such as Group B streptococcus or bacterial vaginosis) in asymptomatic women.
- If bacterial vaginosis or candida infection is diagnosed or suspected the infection should be treated and the LNG-IUS insertion inserted without delay.
- Cases of Group A Streptococcus have been reported post IU inserted. Such cases are rare
  but can include life threatening septicaemia, invasive Group A Streptococcus (such as
  necrotising fasciities) and Streptococcal toxic shock syndrome. If a women is found to have
  Group A streptococcus in the vagina she should be treated and the LNG-IUS insertion
  delayed. In addition women using an intrauterine method should be advised to seek medical
  advice if they experience signs or symptoms of infection.
- NICE guidelines recommend that antibiotic prophylaxis against infective endocarditis is no longer recommended for women for defined interventional procedures. This does not exclude antibiotics on a case by case basis. If there is suspected infection at the site of the genitourinary procedure an antibiotic that covers the organisms that cause infective endocardititis should be considered.

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 9	COPIES AVAILABLE: www.wossexualhealthmcn.org

## **Timing of Insertion**

Circumstances	Timing of insertion	Additional precautions
All circumstances	Any time in the menstrual cycle if reasonably certain the woman is not pregnant or at risk of pregnancy (outside product license after day 7)	Yes required for 7 days unless inserted in the first 7 days of the menstrual cycle
Post-partum incl caesarian section and breast feeding	Any time after 4 weeks post-partum and it is reasonably certain the woman is not pregnant or at risk of pregnancy (outside product license which says 6 weeks)	Yes required for 7 days unless inserted in the first 7 days of the menstrual cycle of if fully meeting lactation amenorrhoea method criteria
Following abortion (all induced or	<b>Post-surgical abortion:</b> ideally should be inserted at the end of the procedure	If an LNG-IUS is fitted after day 5 post abortion, ectopic pregnancy and miscarriage
spontaneous < 24 weeks gestation), ectopic pregnancy and miscarriage	Post medical abortion: can be fitted at any time after completion of the second part (ie after the passage of products of conception confirmed by clinical assessment and or / local protocols. Note some services offering early medical discharge (products passed at home) opt to insert in those with a negative pregnancy test at the time of the follow up visit 2 to 3 weeks post abortion (provided no risk of further pregnancy since abortion)	additional precautions required for 7 days.
	Post ectopic pregnancy and miscarriage: ideally should be inserted immediately after treatment for ectopic pregnancy or miscarriage	
Following administration of oral EC	Should not be inserted until pregnancy can be excluded	
CHC	Week 2 or 3 of CHC cycle or day 1 of hormone free interval	No, provided the CHC used correctly for the 7 days prior to insertion
	Week 1 of CHC cycle	Continue CHC for 7 days provided no contraindications (some patients may prefer to continue the CHC until end of this cycle of use)

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 10	COPIES AVAILABLE: www.wossexualhealthmcn.org

	Day 2 to day 7 (inclusive) of hormone free interval  If it is anticipated a woman will be on day 2 to day 7 (inclusive) of hormone free interval at the time of insertion she should be advised ahead of time to omit the pill free interval, and provided the CHC used correctly for the 7 days prior to insertion then no additional precautions needed post insertion	Restart CHC and take for 7 days provided no contraindications (having started a new cycle of CHC some patients may prefer to continue the CHC until the end of this cycle of use)
POP	At any time	Continue POP or use additional contraception for 7 days
Progestogen	Up to 3 years post insertion	No
only implant	From 3 years – provided reasonably certain the women is not pregnant or at risk of pregnancy	Yes, 7 days

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 11	COPIES AVAILABLE: www.wossexualhealthmcn.org

Progestogen ≤ 14 weeks post injection only injection	4 14 weeks post injection  14 weeks post injection  15 pt.  16 pt.  16 pt.  17 pt.  18 pt.	No
orny injection	>14 weeks since last injection provided reasonably certain the women is not pregnant or at risk of pregnancy	Yes, 7 days
Barrier methods	Day 1 -7 of the menstrual cycle	No
	After day 7 of the menstrual cycle provided reasonably certain the women is not pregnant or at risk of pregnancy, also refer to local protocols since some services choose not to consider barrier methods as reliable contraception	Yes, 7 days
Cu-IUD	Any time, additional precautions are also advised in the 7 days before changing in case the LNG-IUS cannot be inserted.	Yes, 7 days

A provider can be reasonably certain a woman is not currently 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 of the onset of a normal period
- She is not breastfeeding and less than 4 weeks from giving birth
- Is within the first 7 days post-abortion or miscarriage
- Is fully or nearly fully breast feeding, amenorrhoeic, and less than 6 months postpartum.

NB. In addition to the conditions mentioned above, clinicians should also consider whether a women is at risk of becoming pregnant as a result of UPSI within the last 7 days

#### **The Insertion Procedure**

- Clinicians inserting IUC should hold the appropriate letter of Competence in Intrauterine Techniques
  or have achieved the equivalent recognised competences and show evidence of recertification /
  reaccreditation.
- The manufacturer has previously recommended a Mirena® is inserted in a uterus between 6cm and 10cm in length. The manufacturer does not give equivalent information for Kyleena® or Jaydess® but it should be noted Jaydess is only 2mm shorter in length. This does not imply an IUS should never be used in a woman with a uterus that is shorter or longer than recommended.

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 12	COPIES AVAILABLE: www.wossexualhealthmcn.org

• The manufacturer of Mirena® has previously advised insertion in a uterus less than 6cm may be associated with a greater risk of expulsion, perforation, pain, bleeding or pregnancy. In addition, if a uterus sounds to less than 6cm, consideration should be given to the possibility that it may be incorrect with the risk of non fundal placement.

#### **Interventions that ease LNG-IUS insertion**

- Factors that predict pain during insertion include nulliparity or no history of vaginal delivery, anxiety, and length of time since last pregnancy or last menses.
- Oral analgesia prior to insertion is commonly recommended but evidence suggests oral ibuprofen at does up to 600mg has been shown not to reduce pain.
- Local anaesthetic block is not routinely required but should be available.

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 13	COPIES AVAILABLE: www.wossexualhealthmcn.org

#### **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 LNG-IUS inserted should be recorded.
- Details of local anaesthetic used, if any including batch number and expiry date should be recorded.
- Permission should be sought as to whether the client's GP can be notified.

#### Advice following Insertion

- Women should be informed what device has been inserted and when it needs to be removed / replaced. Clients should be given written information on the method.
- Insertion of an LNG-IUS may cause pain and discomfort for a few hours and women should be informed about appropriate pain relief.
- A routine follow up visit can be advised 3 to 6 weeks following insertion. This is not essential and it
  may be more important to advise women as to the signs and symptoms of infection, perforation,
  expulsion, pregnancy and returning if they have any problems.
- 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 to four weeks after insertion. Women should be informed about the use of additional precautions for protection from STIs and advised on the appropriate timings of STI testing after unprotected sexual intercourse.
- Patients at increased risk of developing infective endocarditis should already be familiar with symptoms that may indicate infection. Any episode of infection in people at risk of infective endocarditis should be investigated and treated promptly to reduce the risk of endocarditis developing.
- Women should be informed about how to check for the presence of LNG-IUS threads and
  encouraged to do this regularly with the aim of recognising expulsion / perforation. If threads cannot
  be felt they should be advised to use additional contraception until they seek medical advice.
  Likewise if they can feel the stem of the LNG-IUS they should also seek medical advice and use
  additional contraception. Consideration may also have to be given to the use of emergency hormonal
  contraception.
- ADD INFO re POST INSERTION VIDEO
- Women should be advised to seek medical help (to exclude ectopic pregnancy) if they
  develop abdominal pain, especially in connection with a missed period or bleeding after
  amenorrhoea.
- In addition, women should be advised to seek medical assistance at any time if they develop persistent menstrual abnormalities (apart from the gradual onset of amenorrhoea or oligomenorrhoea) as this may indicate the presence of an STI, pregnancy or gynecological pathology.
- Women should be informed about the use of additional precautions for protection from STIs and advised on the appropriate timings of STI testing after unprotected sexual intercourse.
- There is no reason for the LNG-IUS to be removed in women who are undergoing Magnetic Resonance Scanning.

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 14	COPIES AVAILABLE: ww.wossexualhealthmcn.org

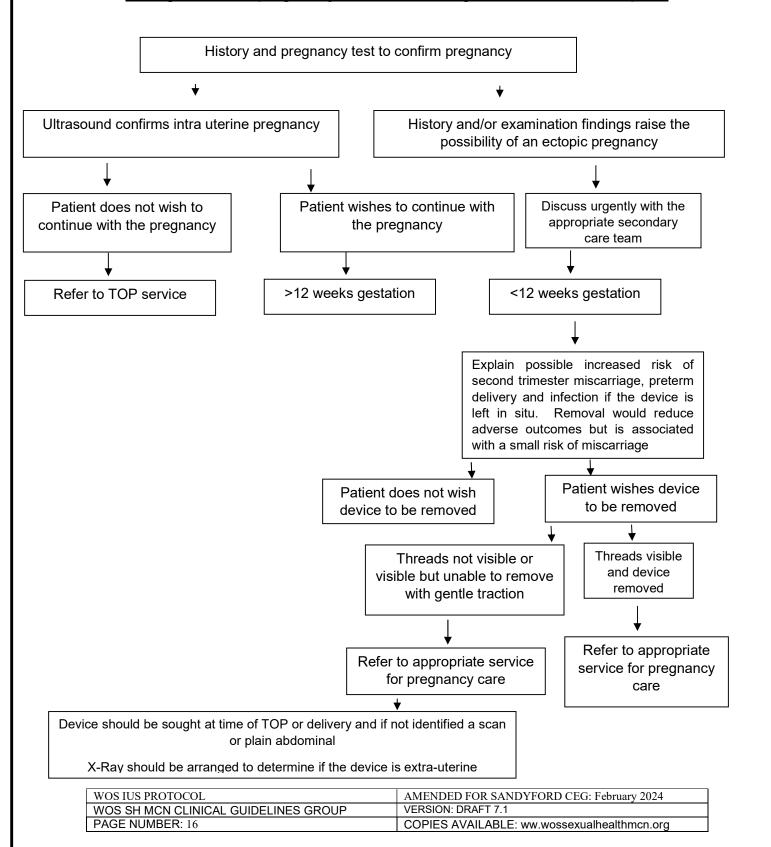
## **Problems Associated with LNG-IUS usage**

Abnormal bleeding	Common in the first 3-6 months after insertion. May indicate the presence of an STI, gynaecological pathology or pregnancy and when appropriate women should be investigated accordingly.
	If persists beyond the first 6 months gynaecological pathology should be excluded.
	A change in pattern of bleeding (apart from gradual onset of amenorrhoea or oligomenorrhoea) warrants further investigations to exclude infection, pregnancy and gynaecological pathology.
	There is no evidence for the most appropriate treatment option for unscheduled bleeding in women in whom infection, pregnancy and gynaecological pathology has been excluded. For women who wish to continue the LNG-IUS and are medically eligible, a COC could be tried for up to three months (this can be the usual cyclic manner or continuously without a pill free interval – unlicensed use)
Lost threads	See flow chart
Non fundally placed IUC	The decision to remove and replace a non-fundally placed IUC is a matter of individual clinical judgement following discussion with the woman and consideration of her individual circumstances. There is limited evidence to allow for recommendations.
Pregnancy	Women who conceive with an IUC in situ are at greater risk of adverse pregnancy outcomes such as spontaneous abortion, preterm delivery, septic abortion and chorioamnionitis. From the limited evidence available removal of the IUC early in pregnancy may help improve outcomes. See flow chart to determine whether attempt should be made to remove the LNG-IUS and ongoing management.
Suspected pelvic infection	Women with symptoms and signs suggestive of pelvic infection - start appropriate antibiotics. There is no need to remove the LNG-IUS unless symptoms fail to resolve within the following 72 hours or unless the woman wishes removal.  Arrange follow 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, counseling regarding safer sex and partner notification.
Suspected perforation	A recent review of the reported cases of uterine perforation found that only 8% were suspected or detected at the time of insertion  If suspected at the time of insertion the procedure should be stopped and vital signs (blood pressure and pulse rate) and level of discomfort monitored until stable. Management needs to be discussed with a senior clinician.  A history of mild abdominal pain, 'lost threads', changes in bleeding and a history of pain at the time of insertion) may suggest perforation when a patient attends for follow up.  When there is any possibility of perforation at the time of insertion or later, an ultrasound scan (USS) and then if indicated a plain abdominal and pelvic X ray to locate the device should be arranged. Women should be advised to use additional contraceptive precautions in the interim.  LNG-IUS users with ALO detected on a smear who have no symptoms should be advised there is
Presence of actinomyces- like organisms (ALO)	no reason to remove the LNG-IUS 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 LNG-IUS.

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 15	COPIES AVAILABLE: ww.wossexualhealthmcn.org



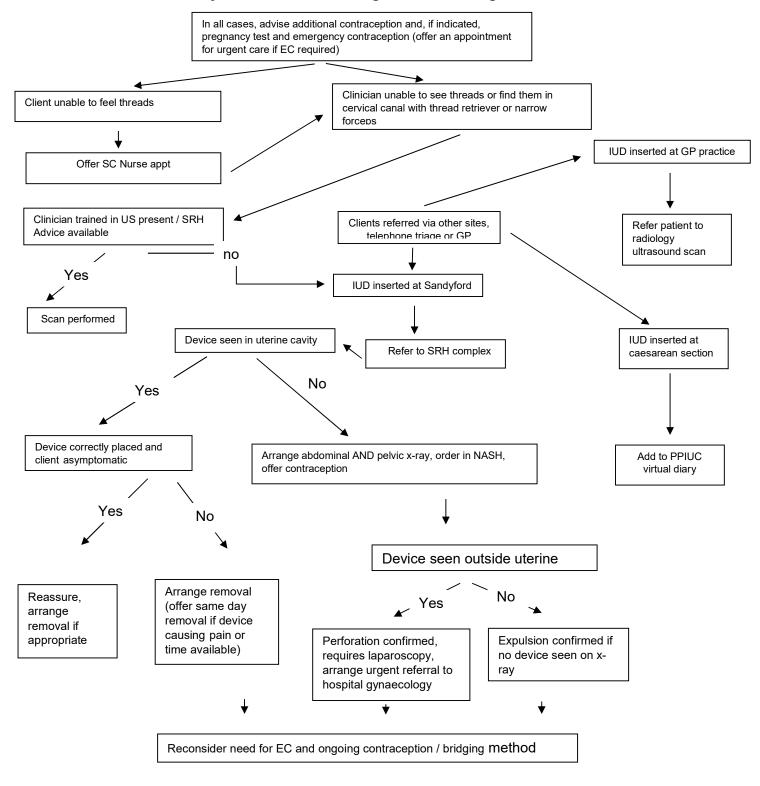
#### Management of a pregnancy in a woman using intrauterine contraception



WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 17	COPIES AVAILABLE: www.wossexualhealthmcn.org



#### Sandyford Protocol for Management of Missing IUD Threads



WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 18	COPIES AVAILABLE: ww.wossexualhealthmcn.org
	-

- \* There should always be an SRH consultant on the rota as 'SRH Advice' and they should be contacted if the client is in Sandyford Central Mon Fri 9-4
- **N.B.** Clients returning for removal of an IUD/IUS with missing threads will need an appointment in a SRH complex clinic, not a routine 20 minute or IUD list.

## **Timing of Removal / Replacement of LNG-IUS**

Reason for removal	Recommendation for removal
For a planned	Offer pre pregnancy advice regarding lifestyle, diet, folic acid, rubella immunity,
pregnancy	vitamin D then removal at any time in the cycle when the women is ready to conceive
When removal is within the licensed duration of use and alternative method is chosen.	Avoid intercourse or use another method of contraception for at least 7 days before removal. Advise contraception thereafter.
When replacement is within the licensed duration of use	Advise condoms for at least 7 days before the procedure in case reinsertion is not possible
When use or replacement is outwith the licensed duration of use	Women who are under 45 at the time of Mirena® insertion and who present for replacement more than 8 years after insertion should be delayed until the women has a negative pregnancy test at least 3 weeks after the last unprotected sexual intercourse.
	A Mirena® inserted ≥45 can remain <i>in situ</i> until age 55 if used for contraception or heavy menstrual bleeding even if the woman is not amenorrhoeic.
	Contraception can be stopped age 55 as the risk of pregnancy is extremely low even in women still experiencing menstrual bleeding. For personal reasons, an individual woman may wish to continue using a LNG-IUS beyond this age for reasons relating to perceived non-contraceptive benefits. The LNG-IUS should ultimately be removed as those devices left <i>in situ</i> may be a focus for complications in later years.
	If a woman using LNG-IUS over 50 wishes to stop before age 55, FSH level can be checked. If FSH level is >30 IU/L the LNG-IUS can be discontinued after 1 more year. If FSH level is in premenopausal range then method should be

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 19	COPIES AVAILABLE: www.wossexualhealthmcn.org

continued and FSH level checked again 1 year later.

Women using Mirena® for endometrial protection in an HRT regimen must have their device changed every 5 years.

There is insufficient evidence at present to recommend using Levosert®. Kyleena® or Jaydess® beyond their licensed duration. Women who have Levosert®. Kyleena® or Jaydess® in situ beyond their licensed duration should advised to use additional precautions until pregnancy can be excluded after which a replacement device can be inserted.

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 20	COPIES AVAILABLE: www.wossexualhealthmcn.org

#### Management of patients following PPIUC (Postpartum Intrauterine Contraception)

#### **Background**

Postpartum intrauterine contraception or 'PPIUC' refers to the insertion of intrauterine contraception within 48 hours after delivery, either at time of caesarean section or following vaginal birth. As the expulsion rate is slightly higher, and a higher proportion of women are likely to have non-visible threads, women are advised to attend for a coil check, as opposed to self-checking for threads. Women are advised to attend Sandyford services for a coil check approximately 4-6 weeks after insertion of PPIUC.

Referrals are emailed to <u>Sandyford.PostPartum@ggc.scot.nhs.uk</u> by the maternity services. An appointment is then arranged by the Sandyford Administration Team.

Referral details can be found in NaSH under MEDIA ITEMS: PPIUC REFERRAL.

Many women will be due their cervical screening, use this as an opportunity to perform opportunistic screening if needed.

#### Visible Threads

If threads are visible and appropriate length, and patient has had no problems since insertion, then they can be reassured. No further follow-up is necessary.

#### Long threads

Threads are either not trimmed, or left longer, at the time of insertion of PPIUC, to allow for involution of the enlarged uterus. The threads may be longer in the vagina or may even protrude beyond the vaginal entrance.

- If threads protrude beyond vaginal entrance, they can be trimmed to skin prior to speculum examination
- The threads can be teased from underneath the speculum blades with a cotton swab to allow for easier trimming
- Threads can be trimmed to standard length (2-3cm beyond cervical os)

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 21	COPIES AVAILABLE: www.wossexualhealthmcn.org

- Unless the stem of the intrauterine contraception (IUC) is visible, or symptoms suggest possible partial expulsion, no further action is required
- US scan is not routinely required for long threads in this setting

#### **Device at cervix**

The expulsion rate after PPIUC is slightly higher, and a proportion of these may be partial expulsion. The patient may have had symptoms such as pain, particularly during intercourse.

- If the stem of the device is visible, remove at initial review provided there has been no unprotected sex within the past 7 days.
- If the device is removed, emergency contraception should be considered, and a plan made for ongoing contraception.
- If the patient wishes further IUC then an appointment for this can be arranged and an interim method of contraception should be arranged. An appointment should be accommodated within 2 weeks.

Patients can be appointed to:

- o IUD list
- o SC SRH PPIUC on a Monday AM
- o SC UC with SRH support

#### Non-visible threads

Due to the methods of insertion of PPIUC, up to 50% of women may have non-visible threads at initial review. The majority of devices will still be in-situ, but expulsion requires to be excluded.

#### Management at Initial Review

- Enquire as to whether there is any obvious history of expulsion, or symptoms suggestive of this (e.g. pain, particularly during intercourse)
- Arrange for follow-up US scan. This should be within 2 weeks. If unable to accommodate please discuss with SRH Consultant On-Call.
  - Appoint to either (see flow-chart)
    - SC SRH PPIUC Monday AM clinic
    - SC UC with SRH Support
- Arrange an alternative method of contraception in the interim

#### Management in SRH Complex clinic

• If no device seen in uterine cavity on US scan, and no clear history of expulsion, arrange an abdominal/pelvic X-ray to exclude perforation. Consider ongoing contraceptive need.

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 22	COPIES AVAILABLE: www.wossexualhealthmcn.org

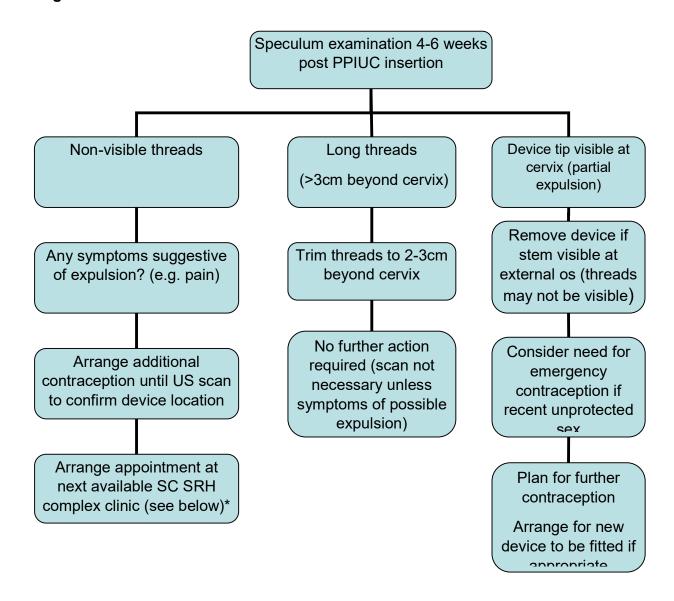
- If no device seen on abdominal/pelvic x-ray, proceed to reinsertion of new device if patient wishes, no risk of pregnancy, and over 4 weeks post-partum.
- If device located within uterine cavity patient can be reassured and no further action required.
- Women can be advised if threads do not become visible with time, she may require to return to Sandyford services to have device changed or removed when the time comes.

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 23	COPIES AVAILABLE: www.wossexualhealthmcn.org

# West of Scotland Sexual Health Managed Clinical Network NHS Vyridire (KArren Brighter Gallcowey) NHS Vorth Vulley Screening Gallcowey NHS Vorth Vulley Screening Gallcowey NHS Vorth Vulley Screening Gallcowey And Clycle Lanarkalire

#### Adapted from West of Scotland Protocol

# Flowchart: Thread Check Post Insertion of IUC at Caesarean Section or following Vaginal Birth



# \*Patients requiring USS to confirm device location should be appointed within 2 weeks to:

- SC SRH PPIUC Monday AM clinic
- SC UC with SRH Support
- Please discuss with SRH Consultant On-call if any issues

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 24	COPIES AVAILABLE: www.wossexualhealthmcn.org

#### **References**

Faculty of Sexual and Reproductive Health Care Clinical Effectiveness Unit FSRH (April 2015, updated October 2015) Guidance Intrauterine Contraception

http://www.fsrh.org/pdfs/CEUGuidanceIntrauterineContraception.pdf [accessed Feb 2021]

Faculty of Sexual and Reproductive Health Care Clinical Effectiveness Unit FSRH Guidance (January 2017) Contraception after Pregnancy

https://www.fsrh.org/standards-and-guidance/documents/contraception-after-pregnancy-guideline-january-2017/ [accessed Feb 2021]

Faculty of Sexual and Reproductive Health Care Clinical Effectiveness Unit FSRH Guidance Contraception for women over 40 years.

https://www.fsrh.org/standards-and-guidance/documents/fsrh-guidance-contraception-for-women-aged-over-40-years-2017/

[accessed Feb 2021]

Faculty of Family Planning and Reproductive Health Care.
The UK Medical Eligibility Criteria for Contraceptive Use (UKMEC 2016)
<a href="http://www.fsrh.org/standards-and-guidance/uk-medical-eligibility-criteria-for-contraceptive-use-ukmec/">http://www.fsrh.org/standards-and-guidance/uk-medical-eligibility-criteria-for-contraceptive-use-ukmec/</a>
[accessed Feb 2021]

Faculty of Sexual and Reproductive Health Care Clinical Effectiveness Unit FSRH Guidance (June 2014) Contraceptive Choices for Women with Cardiac Disease <a href="http://www.fsrh.org/standards-and-guidance/documents/ceu-guidance-contraceptive-choices-for-women-with-cardiac/">http://www.fsrh.org/standards-and-guidance/documents/ceu-guidance-contraceptive-choices-for-women-with-cardiac/</a> [accessed Feb 2021]

National Institute for Health and Clinical Excellence (NICE). Prophylaxis against infective endocarditis; Antimicrobial prophylaxis against infective endocarditis in adults and children undergoing interventional procedures 2016

https://www.nice.org.uk/guidance/cg64 [accessed Feb 2021]

Faculty of Sexual and Reproductive Health. FSRH Guidance. Contraception after pregnancy. January 2017. Available from: https://www.fsrh.org/standards-and-guidance/documents/contraception-after-pregnancy-guideline-january-2017 [accessed March Feb 2021]

https://www.fsrh-statement-covid-19-and-contraception-update-5.11.2020%20(1).pdf March 2020 [accessed Feb 2021]

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 25	COPIES AVAILABLE: www.wossexualhealthmcn.org

https://www.fsrh.org/documents/fsrh-ceu-recommendation-on-extended-use-of-the-etonogestrel/[accessed Feb 2021]

<u>FSRH CEU statement: Extended use of long acting reversible contraception (LARC) - November 2021 - Faculty of Sexual and Reproductive Healthcare [Accessed November 2021]</u>

WOS IUS PROTOCOL	AMENDED FOR SANDYFORD CEG: February 2024
WOS SH MCN CLINICAL GUIDELINES GROUP	VERSION: DRAFT 7.1
PAGE NUMBER: 26	COPIES AVAILABLE: www.wossexualhealthmcn.org