UNIT 27 INTRA UTERINE CONTRACEPTIVE DEVICES

Structure

27.0 OBJECTIVES

At the end of the unit, you should be able to:

- counsel the client about IUD before insertion, during follow up visit and at the time of removal;
- select the patient for insertion of intrauterine device (IUD);
- anticipate difficulties and complications during insertion;
- provide appropriate after care and follow up; and
- know the technique of CuT removal.

27.1 INTRODUCTION

In the previous units you have learnt the various methods of contraception in details. In this unit, we will discuss various aspects of another method of contraception, i.e., intrauterine device (IUD). Using an intrauterine device is more effective in preventing pregnancy than oral contraceptives condoms, sperimicides, barrier methods or natural methods. The current generation of IUDs are safe for most women and about 99 per cent effective over one year of use. But this cannot be advised to all women. The provider must screen potential users, insert the IUD correctly, and follow up the users till the users feel the need and remove if she so desires.

27.2 HISTORICAL PERSPECTIVE

Intrauterine devices (IUDs), an increasingly popular method of contraception have been used for over 30 years. The millions of IUDs in use throughout the world today represent the modem application of an ancient concept. The first IUD discovered were probably pebbles inserted in the uterine cavity of camels by Arabs/Turks to prevent pregnancy during long desert treks undertaken by these animals. Allover the world over 100 million women are estimated to be using IUDs as a method of fertility control of whom, nearly 40% are in China. In India about 4% of the women between 15-44 years are using IUDs.

The first intrauterine contraceptive device as made from silkworm gut in 1909 by Grafeinberg and was later modified to silver ring in 1931, which was observed to be highly effective in preventing pregnancy. In 1971, Zipper *et al*. reported that addition of copper wire with a surface area of approximately 200 mm^2 to the device reduced the pregnancy rate to nearly 1 per 100 women years, while pregnancy rate with T device without copper was observed to be 18 per 100 women years. Since then a number of copper bearing devices have been developed which vary in shape and amount of copper they contain. Thus there are many shapes of copper IUDs like Y, T, 7 etc. with varying copper content from 200-380 mm^2. In addition to its improved efficacy, side effects like menstrual blood loss and expulsions are reported to be lower with copper devices than with inert plastic devices like Lippes loop.

The newer developments related to IUD are:

- Impregnation of steroids (levonorgestrel, progresterone) in the device such that a fixed and controlled rate of hormones are released over a period of 6-12 months. The disadvantages of these devices are alteration in regular menstrual cycles, need to replace the device every year and its relative cost.
- Using copper wire with a silver core for the copper containing IUDs to prevent fragmentation of copper wire after prolonged use.

Types of IUDs: IUDs are made of polyethylene, which are inserted into the uterine cavity. They are impregnated with Barium Sulphate so as to render them radio-opaque. These have been made in various shapes and of different materials in the past. But currently, there are only three types of IUDs available worldwide. They are:

- Inert — made of plastic (Lippes loop) or stainless steel (Chinese ring)
- Medicated with a steroid hormone — progesterone containing progestasert and levonorgestrel containing Levonova.
- Copper bearing (Bioactive devices) — CuT-380A, CuT-200B, multiload (MLCu 250 and 375) and the Nova-T. Out of the copper devices, those with wider availability are:
  - — The first generation of copper IUDs: CuT -200 and Multiload-250. These carry copper wire with a surface area of 200-250 mm^2.
  - — The second generation of copper IUDs: CuT-380, CuT-220 C, Nova-T and Multiload-375. These have more copper wire on sleeves and/or a silver core to copper wire. These changes increase efficacy and life span of the device(s).

Check Your Progress 1

1) Why are the IUDs impregnated with Barium Sulphate?

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2) Name two commonly used IUDs in India.

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27.3 COPPER-T DEVICES

Today the IUDs available in India are mainly copper devices. They are CuT-200, CuT-380A, Nova-T, Multiload-250 and 375. CuT-200 is available in National Family Planning Programme and very shorlty CuT-380A is also going to be introduced.

Copper T-200 is a 'T' shaped plastic device made of polyethylene and impregnated with Barium Sulphate to make it radio opaque. It is 3.6 cm in length and 3.2 cm in width. Copper is wound around its vertical stem. Its surface area is 200 mm^2 and the thread is attached to the lower end of the vertical stem.

Fig. 27.1: CuT-200

Shelf life of CuT devices including CuT-200, which was 5 years earlier, has now been approved to be 7 years by the USFDA. After 7 years from the date of manufacture, as printed on the package, the device should be discarded. The device is available in pre-sterilised sealed pouches.

27.3.1 Mechanism of Action

The Copper-T 200B exerts multiple anti-fertility effects on the reproductive tract:

i) It inhibits sperm migration to the upper genital tract by immobilising them by allowing only few sperms to reach the ovum.

ii) It stimulates foreign body reaction in the endometrium and releases macrophages, which prevent implantation.

Effectiveness

It is highly effective. The failure rate is 1-3 per 100 women years.

27.3.2 Advantages and Disadvantages

Advantages

Copper-T 200 B is a safe and reliable method of contraception and it offers several advantages as listed below.

i) Highly effective

ii) Immediately effective after insertion

iii) Effective for 5 years

iv) Does not interfere with sexual intercourse

v) No continued effort to use the method regularly

vi) One time insertion procedure and does not require supplies regularly

vii) Cost effective as no expenses for supplies

viii) Does not affect breast feeding

ix) Does not interact with any medicines the client may be taking

x) Can be removed when required or desired by the client

xi) Return of fertility immediately after removal

xii) Can be used by women of any age who meet the eligibility criteria for use

Disadvantages

Limitations

i) Requires a skilled provider to insert the device and remove it.

ii) Does not protect against Sexually Transmitted Diseases (STDs) including HIV/AIDS.

iii) Cannot be used by women who suffer from Reproductive Tract Infections (RTIs)/ STDs or by women with spouse/partner with STD.

27.3.3 Side Effects and Complications

i) **Common Side Effects:**

- In the first week: mild cramps, bleeding or spotting
- In the first three months: longer and heavier periods, increased cramps during periods, bleeding or spotting between periods and expulsion of Copper T (partial or complete)

ii) **Less Common Side Effects and Complications**

Continuation of side effects beyond three months, anaemia, perforation of uterus, lost Copper-T strings, Pelvic Inflammatory Disease (PID) (due to poor infection control or flaring up of undiagnosed infection) and ectopic pregnancy (does not prevent ectopic pregnancy)

27.3.4 Warning Signals

As a provider, you should explain that she should report whenever she has questions or problems. If the client speaks English, you can help her remember the warning signals by using the English word ‘PAINS’ as mentioned below:

P : Period late (with symptoms of pregnancy, such as nausea, tender breasts, etc.), abnormal spotting or bleeding.

A : Abdominal pain or pain with intercourse.

I : Infection (rule out any PID).

N : Not feeling well, fever, chills.

S : String missing, shorter or longer.

Women experiencing any of these symptoms should return to the clinic as soon as possible. If allergic symptoms occur, the woman should be instructed to tell her physician that she is using a copper containing device.

Check Your Progress 2

1) Name five advantages of IUD.

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2) Name five complications of IUD.

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27.4 INSERTION OF IUD

IUD insertion is performed by doctors, Lady Health Visitors and Auxiliary Nurse Midwife in our country. The latter two categories carry out the insertions after requisite technical training. Experience with the IUD throughout the world has demonstrated that the skill and experience of the health personnel whether doctor, LHV or ANM are of utmost importance for its continued use.

The IUD should be inserted only at places where adequate facilities like privacy for consultation, examination and insertion are present. Though in some states devices are inserted “at home”, it is suggested that the IUD be inserted in the clinical facility (post partum centre) itself.

Since Cu-T is in National Family Welfare Programmes, we will be describing about Copper-T in the following sub-sections:

27.4.1 Counselling for Copper-T

a) **Method-specific Counselling**

Once a client has chosen Copper-T for family planning, then method specific counselling should be done as follows. Counselling should be done every time a client comes for re-insertion of Copper-T. Ensure privacy and confidentiality.

i) Establish rapport with the client.

ii) Ask the client what she knows about Copper-T, rumours (if any) and past experience with Copper-T (in case of a client who has come for re-insertion). (Refer Annexure for common rumours).

iii) Provide information as relevant and clarify doubts. If the client is new, repeat the information on the following. (Show the client Copper-T and make the client feel it during discussions).

- Mechanism of action
- Advantages, disadvantages
- Timing of insertion
- Effectiveness
- Procedure for insertion and the likely problems during insertion and removal
- The need to check to see whether the Copper-T is in place

iv) If the client is still convinced about the decision to use Copper-T and if the timing for insertion is right, conduct an assessment of the client for eligibility. Record history and findings. If found eligible, insert Copper-T as detailed in Practical Manual (MMEL-102). Explain the various procedures during the assessment as well as during insertion. Record the insertion.

v) After insertion, repeat about likely immediate problems as well as problems in the first few months.

vi) Teach the client how to check for strings of Copper-T and when to check. Ask the client to repeat the instructions.

vii) Tell the client about likely serious problems when the client must contact doctor/ health worker and assure that care will be provided.

viii) Tell the client about the need for use of condoms if there is any risk of exposure to STDs.

ix) Tell the client when to return for follow up (see Section 27.5).

b) **Counselling on Return Visit**

Every time a client comes for follow-up, it is important to counsel the client to ensure continuation of the method.

i) Ask the client whether she and her spouse/partner are satisfied with the method.

ii) Ask about problems and if there are complaints of side effects/ problems; manage them as described in Section 27.6.

iii) Assess the client by history and examination for any new conditions that are contra-indications for the use of Copper-T.

iv) If the client wants to continue with the method, repeat reasons for contacting doctor / health worker and when to return for follow up.

v) Record the findings and decision.

c) **Counselling a Client whose Copper-T is Being Removed**

It is important to counsel a client whose Copper-T is being removed because of request by the client or because of contra-indications/complications. It is important to tell clients about immediate return of fertility after the removal of Copper-T.

i) If the client wants another child, tell about immediate return of fertility. Provide information on antenatal care, care during delivery and post-partum family planning.

ii) If the client is requesting for removal of the Copper-T due to side effects, which have persisted in spite of management of the problem, counsel for other methods of family planning.

iii) If the client is removing the Copper-T because of dissatisfaction with the method, counsel (repeat benefits and side effects). If still not convinced, counsel for other methods of family planning.

iv) If the client develops conditions that are contra-indications for use of Copper-T, counsel about other methods of family planning.

v) Record the findings, removal of Copper-T and advice.

27.4.2 Eligibility Criteria

The following sub-section deals with selection of woman who can use Cu-T.

Indications

Appropriate for:

i) Any woman in the reproductive age group, who has borne a child, wanting to space or prevent pregnancy. If requested by a nulliparous woman, she should be referred to a specialist.

ii) Women who are breastfeeding—Copper-T does not affect breastfeeding.

iii) Women who are unable to or unwilling to consistently use another effective contraceptive method. This group includes women who have contraindications for using a hormonal contraceptive.

Precautions

a) ***Absolute Contraindications***

Copper-T should not be inserted in the following conditions/ situations:

i) Pregnancy

ii) Excessive menstrual bleeding or irregular bleeding in between periods or after intercourse:

- Copper-T increases bleeding during periods especially during the first few months of insertion, which may worsen the existing excessive menstrual bleeding.
- Irregular bleeding in between periods or after intercourse is suggestive of genital tract cancers or other pathology and insertion of Copper-T may cause bleeding and secondary infection.

iii) Active genital tract infection or infection in the recent past: Vaginitis, cervicitis, PID, puerperal/post-abortal sepsis, STDs of self /spouse/partner and at risk of STD/HIV:

- In case of lower genital tract infections, during insertion, infection can be introduced into the uterine cavity leading to PID and subsequent infertility.
- If PID already exists, the inflammatory reaction caused by Copper-T can further aggravate the disease. It is appropriate to insert Copper-T once the infection is treated completely.
- In case of known HIV infection, the risk of pelvic infection is high with the existing immune deficiency.

iv) Uterine pathology such as known pelvic tuberculosis, enlarged and/or abnormal uterus due to fibroids, uterine abnormalities, etc.:

- In case of pelvic tuberculosis, Copper-T insertion may cause bleeding and secondary infection.

- In case of uterine abnormality, placement of Copper-T will not be proper leading to expulsions, perforations and pregnancy.

v) Severe anaemia:

Since a high percentage of Indian women are anaemic, increased bleeding with Copper-T may worsen the condition.

vi) Previous history of ectopic pregnancy:

Women with history of ectopic pregnancy are more at risk of future ectopic pregnancies. Since Copper-T does not suppress ovulation, some sperms may reach the ovum and fertilise it. If this happens in women who are at risk of ectopic pregnancy, Copper-T will not prevent the ectopic pregnancy.

b) ***Relative Contraindications***

Copper-T should be inserted with care in the following conditions/situations:

i) Caesarean section within the last three months

ii) Prolonged lactation causing hyperinvoluted uterus

Since the uterus is very small and soft, the risk of perforation is high.

It is advisable to refer to a specialist in the following conditions/situations:

iii) Medical problems such as known or suspected valvular heart disease

Risk of endocarditis is high.

iv) Nulliparous women

Although it is not a contra-indication to insert Copper T in nulliparous women, it is included in the list for the following reasons. The risk of PID and subsequent infertility following Copper T insertion, where 100% infection prevention measures can not be ensured or in case of clients who have an undiagnosed genital tract infection, is well known.

27.4.3 Client Assessment

a) **History Taking**

History should be taken very carefully and should include the following:

- Date of last menstrual period
- Periods—regular or irregular, flow excessive or normal
- Any bleeding/spotting between periods or after intercourse
- Details of deliveries and abortions/Medical Termination of Pregnancy (MTP), history of caesarean section, ectopic pregnancy
- Details of breast feeding
- Recent history of postpartum/post-abortion infections
- History of pelvic infections or sexually transmitted diseases (abnormal vaginal discharge, lower abdominal pain)
- History of pelvic tuberculosis
- History of genital tract malignancy
- History of heart disease

b) **General and Systemic Examination**

Particular attention has to be paid to detect whether the client has severe anaemia or heart disease. Check for lower abdominal tenderness and masses.

c) **Pelvic Examination**

- Preparation

  i) Ensure that the supplies and equipments for pelvic examination are ready (see MMEL-102, Unit 6).

  ii) Explain various procedures to the client and continue to explain before each step.

  iii) Ask the client to empty her bladder and lie down on the table on her back with knees flexed (dorsal position).

  iv) Protect the client's privacy.

  v) Wash and scrub hands. Wear sterile gloves taking care that outer side of gloves does not get contaminated.

- Examination of external genital

  Inspect the externalia: genital labia majora, minora and introitus for redness, patches, ulcer, growth, warts, swelling and discharge.

  Do not insert Cu-T if any evidence of infection or STD. Treat or refer to a specialist

- For per speculum and Bimanual examination (Refer to Unit 2 of MMEL-102).

d) **Laboratory Test:** It is advisable to get the haemoglobin of the client done.

Send the vaginal smear and pap smear (if taken) for examination.

e) Record findings in IUD screening card (see Annexure)

If any contraindication is present, do not insert Cu-T.

27.4.4 Guidelines for Insertion of Cu-T

a) **Timing of Insertion**

i) Within 7 days of the LMP. (It can be inserted in the last two days of menstruation if acceptable to the client.)

ii) After four-six weeks postpartum. (It is possible to do a post- placental insertion of Copper T in situations where specialists are available.)

iii) Immediately after MTP is performed.

iv) After the first period following spontaneous abortion.

v) In lactational amenorrhoea (after excluding pregnancy).

b) **Place of Insertion**

Copper-T should be inserted only at the sub-centre, primary health centre, community health centre or hospital.

Copper-T must not be inserted at the residence of the client.

Equipment and supplies and insertion of Cu-T is described in Unit 6 of MMEL-102.

Check Your Progress 3

1) Name five contraindications for insertion of Cu-T.

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2) Tick the correct answer—True (T) or False (F):

a) Post menstrual insertion of IUD rules out the possibility of pregnancy. (T/F)

b) Patients with abnormal uterine bleeding should be investigated after insertion of IUD. (T/F)

c) IUD can be safely inserted after 1st trimester MTP. (T/F)

d) Breastfeeding women are protected from conception for one year. (T/F)

e) Uterine perforation of uterus while sounding the uterus is managed conservatively. (T/F)

27.5 AFTER CARE

27.5.1 Post Insertion Advice to the Client

Counsel the client after insertion. Provide the following information:

i) The Copper-T is immediately effective after insertion.

ii) There may be slight bleeding or spotting for a week. If the bleeding is profuse or prolonged, contact the HW(F)/HA(F)/ Medical Officer.

iii) It is normal to have slight cramping in the first 48 hours. Take paracetemol if needed. The cramping should not last longer than 48 hours. If it becomes severe, contact the HW(F)/HA(F)/Medical Officer.

iv) Check for the string of the Copper-T to be sure that the Copper-T is still inside the uterus as instructed below (use the cut end of the string to make the client feel the texture of the string):

- First wash hands to reduce chances of introducing infection.
- Sit in a squatting position and reach into the vagina as far as back as possible and feel for the strings. Do not pull the thread as it might dislodge the Copper-T.
- Wash hands again.

v) Check for the string after each menstrual period

Check menstrual cloth for Copper-T as sometimes it is expelled with menstrual blood.

vi) There may be spotting or increased bleeding during menstrual period for the first 2-3 months or so but they tend to become normal thereafter.

vii) Report immediately to HW(F)/HA(F)/Medical Officer if any of the following happens (warning signs):

- Missed periods, abnormal bleeding or spotting
- Abdominal pain, pain with intercourse
- Exposure to STDs, abnormal discharge per vagina
- String of Copper-T missing, getting longer or shorter or Copper T felt inside the vagina or has been expelled.

viii) Return after a month or after the first periods for follow up.

Warning Signs

P : Periods late, spotting, bleeding

A : Abdominal pain, pain with intercourse, severe cramps

I : Infection: discharge, exposure to STDs

N : Not feeling well, fever, chills along with lower abdominal pain

S : String missing, shorter or longer

Follow Up Schedule

The recommended follow up schedule is as follows:

- First visit immediately after the first menstrual period or after one month
- Subsequent visits after three months and thereafter once a year. During each follow up visit, the client should be counselled as described in sub-section 27.4.1.

The Medical Officer should instruct the HW(F) that during her routine field visits she should enquire about any problems and advise clients for follow-up.

27.5.2 Management of Side Effects and Complications

Always counsel clients who have side effects and other complications as described in - sub-section 27.4.1 If the Copper-T is removed, counsel for other methods of family planning.

a) **Bleeding**

The most common and important side-effect of Copper-T insertion is bleeding per vagina.

i) Ask whether it is spotting or heavy bleeding.

ii) In case of bleeding, do a speculum and bimanual pelvic examination to rule out any pathology or pregnancy.

- If pregnant or if there is evidence of any pathology, refer to a specialist.
- If less than three months after insertion and no evidence of pathology or pregnancy, reassure the client and give iron and folic acid tablets for a month. Ask the client to return if the situation worsens.
- If more than three months after insertion, refer to a specialist even if no evidence of pathology.
- If severely anaemic, remove the Copper T and treat for anaemia. Counsel for other methods of family planning.

b) **Lower Abdominal Pain**

i) Ask whether it is mild cramps or severe cramps. If mild cramps, treat with paracetemol.

ii) If the cramps are severe or become severe:

- If evidence of lower abdominal tenderness, refer to a specialist.
- If no tenderness, do a speculum examination to confirm the position of the Copper T (whether it is displaced). If displaced, remove the Copper T. If no evidence of pregnancy or infection, insert another Copper T, if the client is willing.
- If no evidence of tenderness or displacement of the Copper T, remove the Copper Counsel for other methods of family planning.

c) **Perforation**

i) ***Perforation while Inserting***

Perforation is suspected if:

- while sounding the uterus:
  - — there is feeling of giving way
  - — sound measures more than 9 centimetres

- rapid pulse
- severe abdominal cramps

Perforation occurs most frequently during insertion.

While inserting the Copper T, perforation can occur if the steps for insertion are not followed closely or the selection of the client is not appropriate. The risk of perforation is high if the uterus is retroverted or if the size of the uterus is less than 6 centimetres.

- If perforation is suspected:
  - — stop the procedure
  - — check the pulse and blood pressure
- If the pulse is rapid, the blood pressure is low or the pain is severe around the uterus, hospitalise. Start I/V fluids and refer the client to a specialist.
- If the pulse and blood pressure are normal, make the client lie down and check the pulse and blood pressure every 15 minutes for an hour.
- If the client is stable, make her sit up and walk around and observe for another hour. If stable, send home with instructions to avoid intercourse for a week. Counsel for another method of family planning.

ii) ***Perforation after Insertion***

The risk of perforation after insertion is less. The risk of perforation is higher in case of Copper-T insertions in post-abortion/immediate post- partum clients and in clients where the uterine size measures less than 6 centimetres. When thread is not seen and/or the client complains of severe abdominal pain, perforation of the uterus and intra- peritoneal migration of Copper-T should be suspected. The client should be referred to a specialist at the earliest.

Perforation can occur without any symptoms.

d) **Infection**

In case of abnormal vaginal discharge, abdominal pain and fever, do a speculum and bimanual examination.

- If there is abnormal vaginal discharge, it is preferable to do a vaginal, smear and treat accordingly. Otherwise give a course of antibiotics and anti-inflammatory drugs.
- If there is no relief, remove the Copper-T.

e) **Amenorrhoea**

It is a rare occurrence.

i) Ask the client when her last menstrual period was, whether she is breast feeding, when she felt the strings last and whether there are any symptoms of pregnancy.

ii) Do a speculum and bimanual examination.

- If the client is not pregnant, reassure and ask her to come for follow up after a month.
- If pregnant and:
  - does not want to continue the pregnancy, refer for MTP.
  - wants to continue with the pregnancy, explain the risk of abortion and sepsis if the Copper-T remains inside the uterus as well as the risk of abortion when the Copper-T is removed.
    - — if the strings are visible, remove the Copper-T with gentle traction.

— if the strings are not visible, then once again explain the risk of abortion and sepsis if the pregnancy continues with the Copper-T inside the uterus. Refer to a specialist.

— if wanting to continue with the pregnancy with the Copper-T inside the uterus, get a written consent from the client about willingness to continue with the pregnancy with the Copper-T in situ.

— Keep the client's record for at least 5 years.

— Advise the client for a hospital delivery. Always examine the placenta and membranes for the Copper-T.

f) **Expulsion**

This occurs mostly in clients where the Copper-T is inserted in the immediate post partum or after spontaneous abortion. Expulsion most commonly occurs in the first year.

i) Ask the client whether she is sure of the expulsion and when the expulsion occurred.

ii) Find out about the last menstrual period.

iii) Do a speculum and bimanual examination to rule out pregnancy.

iv) If no pregnancy or other contraindications for Copper-T and if the client is willing, reinsert Copper-T or advise other methods of family planning.

g) **Missing Copper-T Strings**

i) Ask the client when the strings were last felt.

ii) Do a speculum and bimanual examination to locate the strings.

iii) If strings are not found, refer the client to a specialist.

h) ***Ectopic Pregnancy***

Ectopic pregnancy is rare. If ectopic pregnancy is suspected, refer to a specialist.

27.5.3 Removal and Replacement

Always counsel the client as described in sub-section 27.4.1.

Indications for Removal/Re-insertion

i) After five years of insertion.

This should be done preferably during post-menstrual period. Can be re-inserted at the same time if the client desires. Use a new Copper-T for re-insertion.

ii) Wants another child

iii) Client desires removal

iii) Severe bleeding

iv) Severe abdominal pain

v) Pelvic infection not responding to treatment

vi) Pregnancy

vii) Menopause (Cessation of periods for one year)

viii) Evidence of Copper-T displacement.

In case of re-insertion, make sure that the client is not pregnant.

Procedure of removal is described in the Practical Manual. Copper-T can be reinserted as described in the Practical Manual.

Do's and Don'ts about Copper-T insertion

a) *Do's*

i) Explain the safety of the Copper-T.

ii) Explain the reversibility of Copper-T.

iii) Counter rumours about Copper-T.

iv) Insert the Copper-T preferably within 7 days of last menstrual period.

v) Follow strict infection prevention procedures while inserting/removing Copper-T.

vi) Always do a pelvic examination before inserting the Copper-T.

vii) Use 'No touch technique' when loading the Copper-T.

viii) Uterine sound should be used to measure the length of the cavity of the uterus and the blue flange must be adjusted accordingly.

ix) The blue flange should be in the same plane as the plane of the uterus.

x) Pull the plunger completely out of the inserter tube before removing the tube from the uterus.

xi) Tell the client what to expect and what to do in case of bleeding, pain or expulsion of the Copper-T.

xii) Reassure the client about mild side effects.

xiii) Schedule the return visit.

xiv) Attend sympathetically to every complaint.

xv) Maintain complete records.

xvi) Remove the Copper-T after 5 years of continuous use and reinsert a new one.

xvii) In case of pregnancy with Copper-T and if she desires to continue the pregnancy, take written consent.

b) *Don'ts*

i) Do not insert the Copper-T if :

- there is a suspicion of pregnancy.
- menstrual periods are excessive or very irregular.
- there is any sign of pelvic infection and cervical erosion.
- there is history of septic abortion/puerperal sepsis in the last 3 months.
- there is suspicion of tumour.
- the uterine length is less than 6 centimetres or more than 9 centimetres.
- Any of the contents of the package become contaminated prior to insertion, discard the package and use a new Copper-T package.

ii) Do not keep the Copper-T in the inserter tube for more than five minutes before insertion.

iii) Do not push the plunger to insert the Copper-T.

iv) Do not remove the plunger and inserter tube together.

Do not insist on retaining the Copper-T if it is unacceptable to the client.

c) *Rumours and Facts*

Rumours	**Facts**
1) Copper-T moves from the uterus into the heart or brain.	Copper-T remains in the uterus till it is removed. In case of perforation, it may reach the abdominal cavity, but remains within the pelvis and omentum.
2) Copper-T causes discomfort to the partner during sexual intercourse.	Generally no discomfort is caused. spouse/ However, if the string is long or if the Copper-T is displaced lower it may cause some discomfort.
3) Copper-T causes cancer.	There is no evidence to show that Copper-T causes cancer.

Check Your Progress 4

1) How would you schedule the follow up visits of client after CuT insertion?

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2) Enumerate the indication for CuT removal.

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27.6 GUIDELINES FOR USE OF COPPER-T FOR EMERGENCY CONTRACEPTION

A Copper-releasing IUCD can be used as a very effective method of preventing pregnancy if used within five days of the ‘first’ episode of unprotected sexual intercourse. It provides a highly effective option for preventing pregnancy to women who have had unprotected intercourse due to non-use of contraceptive or a contraceptive accident as well as to women who have been sexually assaulted.

a) **Mechanism of Action**

The mechanism of preventing pregnancy is the same as mentined in sub-section 27.3.1. The main action of Copper-T is in preventing fertilization and implantation.

b) **Advantages and Disadvantages**

The use of Copper-T as an emergency contraception has certain advantages compared to other methods of emergency contraception.

1) The time limit for effective post-coital use of the method for preventing pregnancy is longer (72 hours in the case of Emergency Contraceptive Pills and five days in the case of Copper-T).

2) It is effective even in situations of multiple episodes of unprotected sexual intercourse.

3) Besides preventing pregnancy effectively when used as an emergency contraceptive, it provides an important option to women to continue using it as a regular contraceptive and thus contributes to improving reproductive health of women.

The other advantages of Copper-T and the disadvantages as mentioned in sub-section 27.3.2 also apply when the Copper-T is used for emergency contraception.

c) **Counselling**

Counselling is one of the critical activities when providing any method of emergency contraception for the following reasons:

i) Counselling would help to provide emotional support to a client/couple who is worried about a pregnancy due to unprotected sexual intercourse.

ii) It establishes rapport and confidence in the provider as the provider is helping the client/couple to meet a critical need, which is prevention of an unwanted pregnancy.

iii) It provides an opportunity to help the client/couple start using regularly a contraceptive of their choice as well as ensure sustained correct use of the same.

Every client should be counselled to help planning her family and to choose a method based on informed choice. Wherever possible spouse/partner should be conselled.

The steps for counselling are the same as in sub-section 27.4.1. Special attention should be paid to the following steps:

i) Building a rapport with the client is critical in finding out accurate information about the timing of first unprotected intercourse.

ii) Making the client feel comfortable psychologically is important because of the high level of anxiety particularly in the case of sexual assault.

iii) Being supportive and non-judgmental especially in cases of sexual assault.

iv) Identifying the reason for needing emergency contraception and if contraceptive accident, finding out how the method was used.

v) Providing information on all types of emergency contraceptive methods available in the country and the comparative advantages of each.

Once the client/couple is sure about using the Copper-T, follow the steps in method specific counselling as listed under sub-section 27.4.1.

Confidentiality and privacy should be maintained during counselling.

d) **Eligibility Criteria for Use**

The eligibility criteria for use of Copper-T as listed in sub-section 27.4.2 also apply when it is used for emergency contraception. In situations of rape where the risk of STI is high, the use of Copper-T as an emergency contraceptive should be considered carefully as presence of STIs increases the risk of PID.

e) **Client Assessment**

Client assessment is critical unlike in the case of other methods of emergency contraception, as the insertion of Copper-T in clients who are not eligible will worsen the existing conditions. In addition to points listed under history taking in sub-section 27.4.3, it is important to find out information on the first episode of unprotected sexual intercourse and the frequency.

f) **Insertion of Copper-T**

Timing of insertion is critical (within 5 days of the first act of unprotected sexual intercourse). The steps of insertion are the same as mentioned in Prictical Manual. Follow up of all women after the first menstrual period is critical to be sure that the client is not pregnant and to be sure that the Copper-T is *in situ*.

g) **Management of Side Effects**

Management of side effects is same as for routine Cu-T insertion.

27.7 LET US SUM UP

In this unit you have learnt all about intrauterine devices as a temporary method of contraception. The physician must give as much importance to counselling and selection of patients as to the technique of IUD insertion to ensure continuation of this method. Patient compliance improves markedly if she is aware of the advantages of using the device and side effects of the IUD. Adequate attention to logistics, proper sterilization of instruments and provision of drugs like antibiotics, antispasmodics and haematinics for the patients where required, will ensure the confidence and support of the client.

27.8 KEY WORDS

Betadine : Povidone Iodine

ICMR : Indian Council of Medical Research

IUCD : Intrauterine Contraceptive Devices

IUD : Intra Uterine Devices

MTP : Medical Termination of Pregnancy

27.9 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

1) IUDs are impregnated with Barium Sulphate so as to render them radio-opaque.

2) CuT -200, Nova-T

Check Your Progress 2

1)
- Highly effective
- Easy to use
- Provides continuous protection
- Convenient
- Reversible

2)
- Bleeding—longer and heavier periods beyond 3 months
- Anaemia
- Infection perforation
- Pelvic Inflammatory Disease
- Extrauterine pregnancy

Check Your Progress 3

1) i) Pregnancy

ii) heavy bleeding irregular bleeding or post coital bleeding

iii) Active PID

iv) Uterine pathology i.e. anomalies, fibroid, tuberculosis

v) Severe anaemia

vi) Previous history of ectopic pregnancy

2) a) T

b) F

c) T

d) F

e) T

Check Your Progress 4

1)
- 1st visit after one month/next menstrual period.
- 2nd visit after 3 months.
- 3rd visit after 1 year.
- Yearly intervals thereafter.
- Unscheduled visits if she misses the period or if she develops any other symptoms.

2)
- Desire for pregnancy
- Moderate to severe bleeding
- Severe pain abdomen
- Foul smelling discharge
- Pelvic infection not responding to treatment
- Menopause

Annexure

IUCD Screening and Follow-up Card

Name of Health Centre: **District:** **State:** **Registration number:**

Name of the client: **Age:**

Address:

Menstrual history

Age at menarche: Date of last menstrual period

Menstrual cycle: regular/irregular Flow: Scanty/moderate/heavy

Duration: days Pain:

Obstetrical history

Total number of pregnancies. Total number of living children: female male

Number of abortions. Induced Spontaneous:

Date of last delivery/C-section/abortion:

History of ectopic pregnancy.

History of puerperal Infection after delivery or abortion:

Breast feeding

Currently breast feeding: Duration:

Gynaecological history

Inter-menstrual bleeding: Post-coital bleeding

History of cancer of the cervix or uterus:

History of pelvic tuberculosis.

History of RTIs/STDs/HIV

Discharge per vagina: Colour of discharge:

Itching Ulcers of the genitalia Swelling of the genitalia or groin:

Lower abdominal pain: Abdominal mass.

Medical history

History of heart disease:

History of chronic cough/tuberculosis:

General and systemic examination

Pulse: BP: Presence of anaemia:

Heart:

Abdomen:

Pelvic examination

External genitalia: Normal

Abnormal discharge/redness/patches/ulcer/growth/warts/ swelling

Per speculum examination: Normal

Discharge/bleeding/ulcer/growth

Bimanual examination

Cervix: Pointing backwards/ forwards Soft/firm/hard, tenderness on movement/freely mobile, smooth/irregular surface, bleeds to touch

Uterus: Normal

Anteverted/retroverted :

Normal/bulky/small, smooth/irregular surface, soft/firm, mobile/fixed

Adenexa: Normal

Tenderness, mass

Laboratory examination:

Haemoglobin: Vaginal smear: Pap smear:

Details of IUCD insertion

Type of IUCD inserted: Date of insertion:

Any difficulty during insertion: Date advised for follow up:

Follow up

Date	**Menstrual history**	**Pelvic Examination**	**Remarks**