

# Welcome to LEVOPLANT Training

# Introductions

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Split into pairs and ask each other:

1

What is your name?

2

Where are you from?

3

What experience do you have with 2 rod implants?

4

What expectations do you have about this training?

# Ground Rules

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# Purpose of training

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- Introduce Levoplant™
- Provide information on best practice counselling for contraception and LARC
- Practice insertion and removal of Levoplant™
- This is competency based with pass/fail
- Please see as opportunity to refresh your skills and knowledge if you already have experience with 2 rod implant

# Pre Course Knowledge Test

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# Module 1

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## Introduction to Levoplant™ & Counselling

# Levoplant™

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- History/ development of Sino-implant to Levoplant™
- What is the advantage of having additional 2 rod implants in the market?
  - Improves product security,
  - Improves choice
  - Improves pricing
- DKT WomanCare (part of DKT International) is global distributor and marketer of Levoplant™
  - See [www.dktwomancare.org](http://www.dktwomancare.org) for a map of local distributor in each country



# Levoplant™



- World Health Organization prequalified
- Sub-dermal contraceptive implant
- Two small, flexible rods about the size of a matchstick
- Highly effective contraception proved to be 99.8% effective over 3 years (Pearl Index 0.18)
- Can be inserted anytime as long as the woman is not pregnant
- Almost immediate return to fertility



# Implants Comparison

	Nexplanon / Implanon NXT	Jadelle	Levoplant™
Rods	1	2	2(*)
Progestin	Etonogestrel 68 mg	Levonorgestrel 75 mg/rod	Levonorgestrel (*) 75 mg/rod
Length	4 cm	4 cm	4 cm
Diameter	2 mm	2.4 mm	2.4 mm
Plastic	ethylene vinyl acetate	polydimethyl-siloxane	polydimethyl-siloxane
Approved duration of use	3 years	5 years	3 years

(\*) Levonorgestrel is the same ingredient used in oral contraceptive pills, emergency contraceptive pills, and intra-uterine systems.

# Mode of Actions

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1

## Primary mode of action:

- Production of thick cervical mucus which prevents sperm penetration
- Inhibition of ovulation in about 50% of menstrual cycles

# Levoplant™ Effectiveness



PROVED TO BE ONE OF THE MOST EFFECTIVE  
CONTRACEPTIVE METHODS AVAILABLE



Sustained release of  
very low dose of  
levonorgestrel



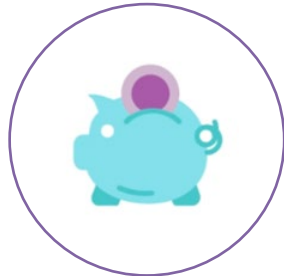
Fewer than 1 pregnancy per  
100 women (<1%) over three  
years



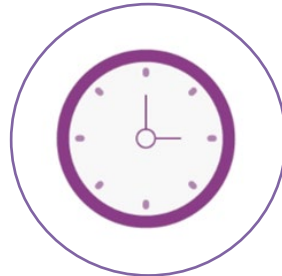
For women >80 kg,  
effectiveness of Levoplant™  
may decrease near the end of  
the duration of use - consider  
replacing Levoplant™ implants  
sooner in this case scenario

# Levoplant™ Benefits

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Low cost procedure



Long-lasting



Limited side effects



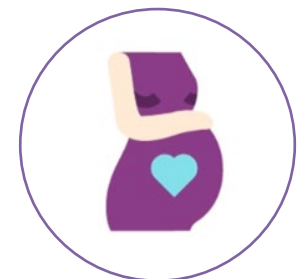
Effective within  
24 hours of insertion



Does not interfere  
with daily activities



No routine return visit is  
required until time of removal



Almost immediate return  
to fertility after removal

# Levoplant™

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- What is the advantage of having additional 2 rod implants in the market?
  - Improves availability,
  - Alleviates production constraints, and
  - Applies downward pressure on pricing
- DKT WomanCare (part of DKT International) is global distributor and marketer of Levoplant™
  - Find in-country distribution partners at: [www.dktwomancare.org/how-to-buy](http://www.dktwomancare.org/how-to-buy)



# Medical Eligibility

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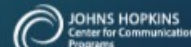
NEW  
2022

# FAMILY PLANNING

A GLOBAL HANDBOOK FOR PROVIDERS



2022 EDITION



# Medical eligibility in client screening

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Ask the client the following questions:



Do you have cirrhosis of the liver, a liver infection, or liver tumor?



Do you have vaginal bleeding that is unusual for you?



Do you have or have you ever had breast cancer?



If the answer is NO to all of these, then proceed for further steps in screening.



# Who can and cannot use Levoplant™

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Have just **given birth**

Any **age**

Have just had an **abortion, miscarriage, or ectopic pregnancy**

Smokes **cigarettes**

Are **breastfeeding**

Are **HIV positive**



If **pregnant** or think is **pregnant**

Has unexplained **vaginal bleeding**

Has severe **liver** infection or tumor

Has history of **breast cancer**

If using **special medicines**, ask your doctor if Levoplant™ is right for you

# Pregnancy Checklist

A woman can start using Levoplant™ any time she wants if it is reasonably certain she is not pregnant. Use the **Pregnancy Rule-Out Checklist** to be reasonably certain she is not pregnant.

NO	1	Did your last menstrual period start within the past 7 days?	YES
NO	2	Have you abstained from sexual intercourse since your last menstrual period or delivery?	YES
NO	3	Have you been using a reliable contraceptive method consistently and correctly since your last menstrual period or delivery or miscarriage?	YES
NO	4	Have you had a baby in the last 4 weeks?	YES
NO	5	Did you have a baby less than 6 months ago, are you fully or nearly-fully breastfeeding, and have you had no menstrual period since then?	YES
NO	6	Have you had a miscarriage or abortion in the past 7 days?	YES

If the client answer ***NO to all of the questions***, pregnancy cannot be ruled out using the checklist. Rule out pregnancy by other means.

If the client answered ***YES to at least one*** of the questions and she is free of signs or symptoms of pregnancy, you can be reasonably sure she is not pregnant.

# Pregnancy Checklist

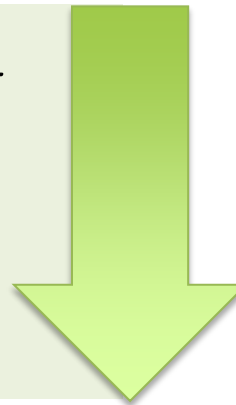
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If the client answer *NO to all of the questions*, pregnancy cannot be ruled out using the checklist. Rule out pregnancy by other means.



If the client answered *YES to at least one* of the questions and she is free of signs or symptoms of pregnancy, you can be reasonably sure she is not pregnant.



# Precaution: Drug Interactions

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Some drugs decrease the effectiveness of implants:

## ○ Anti-epilepsy drugs:

- Barbiturates (phenobarbital)
- Phenytoin
- Carbamazepine
- NOT valproic acid

## ○ Antibiotics:

- Rifampicin
- Griseofulvin



# Side Effects

SIDE EFFECTS	MANAGEMENT
● Abdominal pain	<p><b>Mild abdominal pain</b>, you can suggest:</p> <ul style="list-style-type: none"><li>○ aspirin (325–650 mg)</li><li>○ ibuprofen (200–400 mg)</li><li>○ paracetamol (325–1000 mg),</li><li>○ or other pain reliever.</li></ul> <p><b>For severe abdominal pain:</b></p> <ul style="list-style-type: none"><li>○ Investigate for ectopic pregnancy</li><li>○ Refer at once for immediate diagnosis and care.</li></ul>
● Weight change	Review diet and exercise practices and changes and counsel accordingly
● Breast tenderness	<p>Wearing a supportive bra (day and night). Suggest:</p> <ul style="list-style-type: none"><li>○ aspirin (325–650 mg)</li><li>○ ibuprofen (200–400 mg)</li><li>○ paracetamol (325–1000 mg),</li><li>○ or other pain reliever.</li></ul>

# Side Effects

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## SIDE EFFECTS

## MANAGEMENT

Mood change

If ectopic pregnancy or other serious health condition is suspected, refer at once for immediate diagnosis and care

Irregular Bleeding Pattern

800 mg ibuprofen 3 times daily after meals for 5 days

Give client combined oral contraceptives when the bleeding starts

- One pill containing levonorgestrel daily for 21 days
- Or 50 µg ethinyl estradiol daily for 21 days

# When to insert Levoplant™

## WOMAN'S SITUATION

## WHEN TO START

Having menstrual cycles or switching from a non-hormonal method

If she is starting within 7 days after the start of her monthly bleeding, no need for a backup method.

If it is more than 7 days after the start of her monthly bleeding, she can have Levoplant™ inserted if reasonably certain she is not pregnant. She will need a backup method for the first 7 days after insertion.

If switching from an IUD, she can have Levoplant™ inserted immediately.

Switching from a hormonal method

Immediately, if she has been using the hormonal method consistently and correctly or if it is otherwise reasonably certain she is not pregnant. No need to wait for her next monthly bleeding. No need for a backup method.

If she is switching from injectables, she can have Levoplant™ inserted when the repeat injection would have been given. No need for a backup method.

# When to insert Levoplant™

## WOMAN'S SITUATION

## WHEN TO START

Fully or nearly fully breastfeeding  
- LESS than 6 months after childbirth

Insertion can be performed immediately after giving birth through 6 weeks post partum.

If her monthly bleeding has NOT returned, Levoplant™ can be inserted any time between 6 weeks and 6 months. No need for a backup method.

If her monthly bleeding has returned, she can have Levoplant™ inserted as advised for women having menstrual cycles (on previous page).

Fully or nearly fully breastfeeding  
- MORE than 6 months after childbirth

If her monthly bleeding has NOT returned, she can have Levoplant™ inserted any time it is reasonably certain she is not pregnant. She will need a backup method for the first 7 days after insertion

If her monthly bleeding has returned, she can have Levoplant™ inserted as advised for women having menstrual cycles



# Counselling

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## A Rights Based Approach to care

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This session is for all staff to gain new skills and refresh any knowledge you already have:

# Counselling as part of a Rights Based Approach

“

Principles of a rights-based approach to service delivery: service users must not only have access to safe, effective, acceptable care – there should be access, equity and availability.

”

How can we ensure that the client is getting rights based care?

1

Ensuring stock and method mix

2

Importance of contraceptive choice

3

Importance of consent

# Rights of patients who attend FP services

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- Information
- Access
- Choice
- Security
- Privacy
- Confidentiality
- Comfort
- Follow-up
- Opinion

# Characteristics of Balanced Counselling

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## In Family Planning

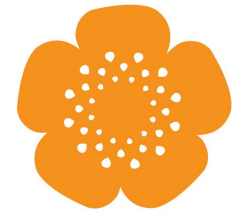


- Sexual and reproductive rights
- Communication
- Listen
- Inform
- Clarify doubts

# What is Good Counselling?

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- Principles of good counselling?
- One well known framework is e.g. EngenderHealth REDI
  - R** Rapport Building
  - E** Exploring
  - D** Decision Making
  - I** Implementing the Decision



**EngenderHealth**  
for a better life

# What is Good Counselling?

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## Rapport Building

- Greet client with respect
- Make introductions and identify category of the client (i.e., new, satisfied return, or dissatisfied return)
- Assure confidentiality and privacy
- Explain the need to discuss sensitive and personal issues
- Use communication skills effectively (throughout the phases)

# What is Good Counselling?

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## E

### Exploring

- Identify reason for the visit in detail
- **New clients:** SRH history, does she want spacing or no more children?
- **Return clients:** satisfaction with current method, confirm it is being used properly. Does she want spacing or no more children? Discuss existing problems, treating them or switching
- **All clients:** Focus on the method(s) of interest to the client, addressing individual and other key factors and risk of STIs/HIV



# What is Good Counselling?

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## Decision Making

Summarize from the Exploring phase:

- Identify the decisions the client needs to make or confirm
- Identify relevant options for each decision (e.g., pregnancy prevention, STI/HIV risk reduction)
- Confirm medical eligibility for contraceptive methods the client is considering
- Help the client consider the benefits, disadvantages, and consequences of each option (provide information to address any remaining knowledge gaps)
- Confirm that any decision the client makes is informed, well-considered, and voluntary



# What is Good Counselling?

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## Implementing the Decision

- Assist the client in developing a concrete and specific plan for implementing the decision(s)
- Identify barriers that the client may face in implementing the plan
- Develop strategies to overcome the barriers
- Make a follow-up plan and/or provide referrals, as needed

# Importance of Informed Consent

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Brainstorm:



What are the principles of informed consent?



*THE IMPORTANCE OF INFORMED  
CONSENT IS TO RECORD THE  
COUNSELLING PROCESS*

# Informed Consent

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Clients right to make decisions about her own health and welfare



Clients must not be coerced, consent must be voluntary



Clients must have capacity to make decisions for herself and understand risks and benefits

# Role Play Counselling and Informed Consent

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# Let's Play ...

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# Module 2

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## Insertion of Levoplant™

# Remember:

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## Characteristics of Balanced Counselling In Family Planning



- Remember the Rights Based Approach
- Sexual and reproductive rights
- Communication
- Listen
- Inform
- Clarify doubts



# Remember:

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Assist the client to make an informed decision,  
based on her needs and wishes!

Ensure method mix!

Dual protection!

# Before you Begin



Once the client has chosen Levoplant™



Counsel client on what to expect, both during and after insertion including common side effects



Be clear and concise



Reassure that common side effects are not harmful



Project professionalism, clinical confidence, and receptivity to questions



If possible, also provide printed materials





# Required Equipment

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## For Insertion:

- Clean tray
- Gallipot
- Kelly or Crile forceps (5.5" or 14 cm)
- Antiseptic soap and water
- Sterile surgical drapes
- One pair of sterile talc-free gloves
- Antiseptic solution (such as iodine)
- Local anesthetic
- 5 ml syringe with needle
- Levoplant™ implants
- Trocar
- Sterile gauze

# Before you Begin

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**ALWAYS USE**  
sterile gloves or forceps  
when handling the rods



If Levoplant™ rod is contaminated  
(for example, falls on the floor),

**LEAVE IT**  
for later disposal  
and  
**OPEN A NEW PACKAGE**  
and continue with the procedure.

# Disposable Trocar

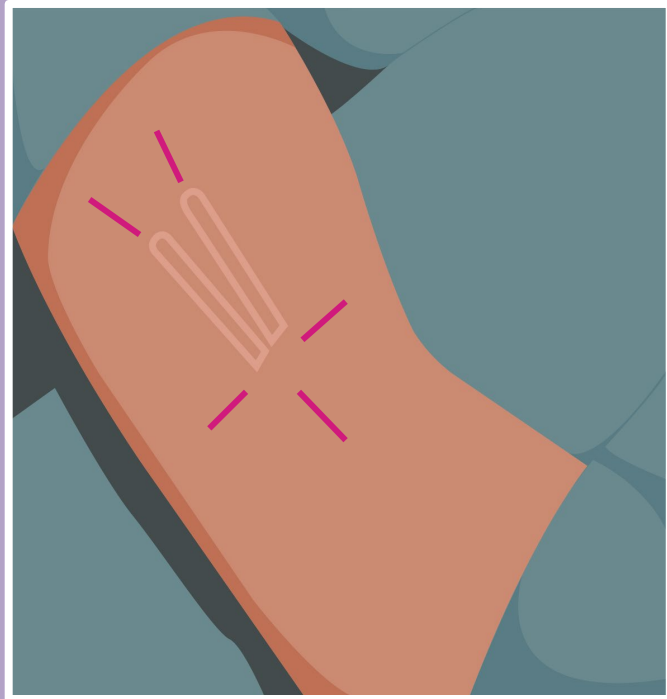


Levoplant™ is provided with a disposable trocar sharp enough to penetrate the skin directly



Disposable trocar can be used to puncture the skin and insert the rod. No need for incision.

# Insertion Procedure

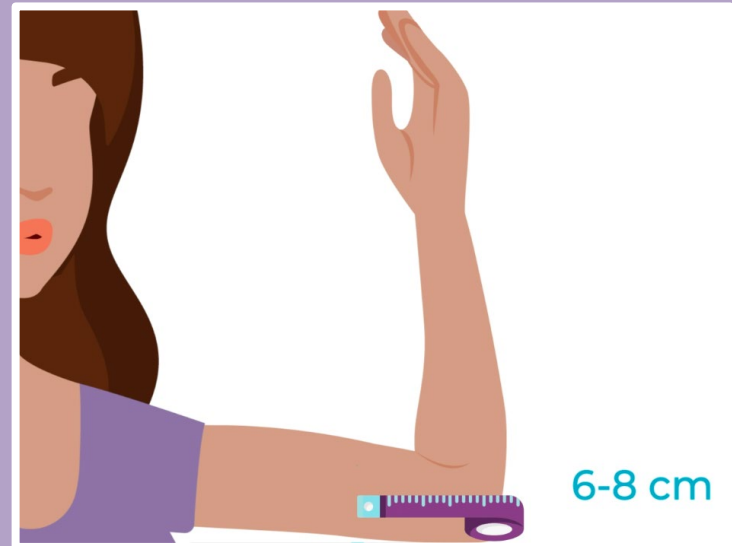


1. Wash the non-dominant arm
2. Allow the client to lie down on the procedure table with her non-dominant arm extended on a sterile or clean cloth on the other table, at a right angle to her body
1. The implants will be inserted sub-dermally using the disposable trocar, in the shape of a narrow V, opening towards the armpit

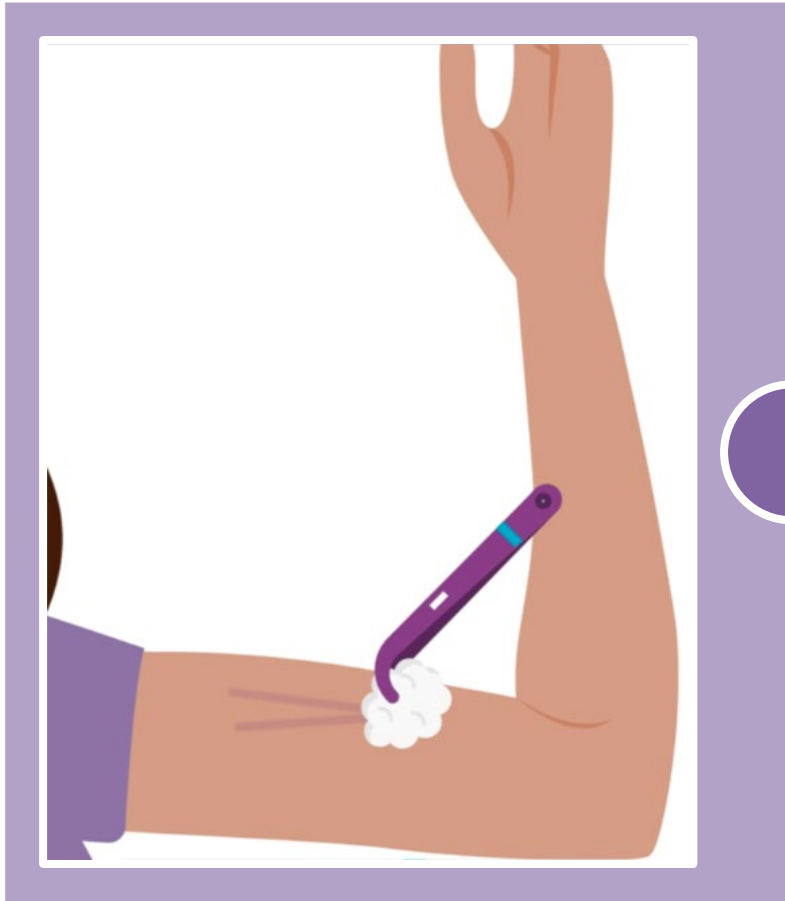
# Insertion Procedure

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4. Identify the site of Levoplant™ insertion at the inner side of the upper arm, 6-8 cm above the elbow



# Insertion Procedure



5. Use a sponge forceps to hold a cotton or gauze swab soaked with antiseptic (betadine or chlorhexidine)

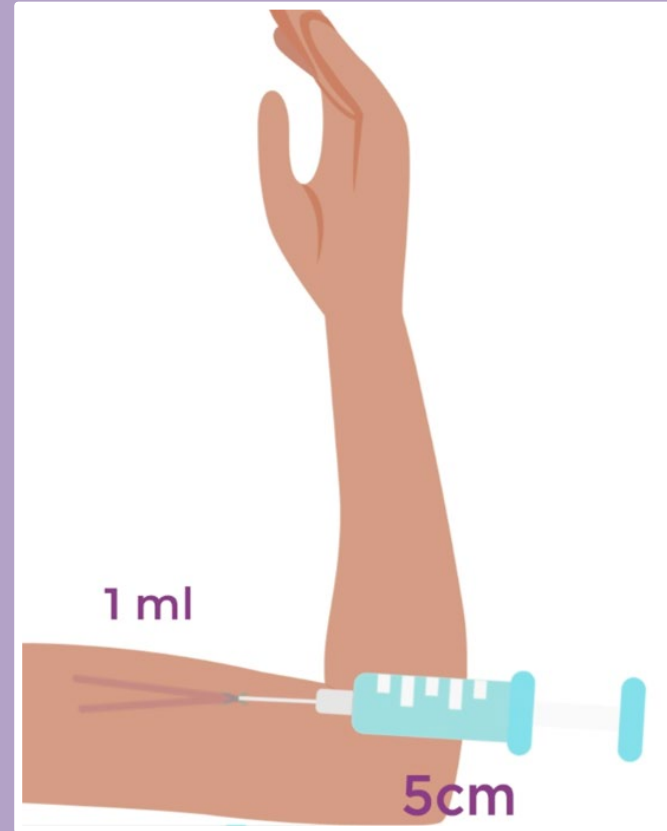
Begin by wiping at the insertion site and move outward in a circular motion for 8 to 13 cm (3 to 5 in.).

If an iodophor (e.g., Betadine) is used, allow to air dry for about 2 minutes before proceeding (iodophors require up to 2 minutes to contact time to release free iodine).

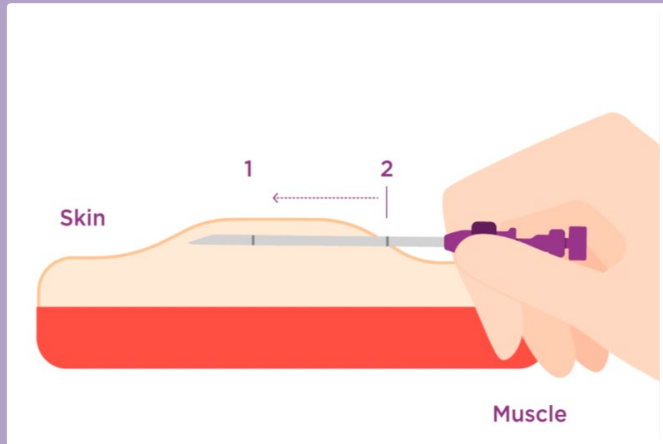


# Insertion Procedure

6. Fill the syringe with 2-4 ml of 1% local anesthetic without adrenaline
7. Inject local anesthetic applied just under the skin, raising a wheal at the insertion point and advancing up to 5 cm along the first insertion track, injecting first half of local anesthetic along the track as you withdraw.
8. Without completely removing the needle, reorient to the second insertion track, advance up to 5 cm, and again inject second half of local anesthetic along track as needle is withdrawn.



# Insertion Procedure



9. Introduce the trocar just beneath the skin at an anesthetized area with the bevel facing up. Tent the skin.
10. Once the tip of the trocar is beneath the skin, advance the trocar along the skin, tenting the skin to keep the implant in the subdermal plane until the second black ring on the trocar (2 in the illustration) reaches the insertion site.

# Insertion Procedure

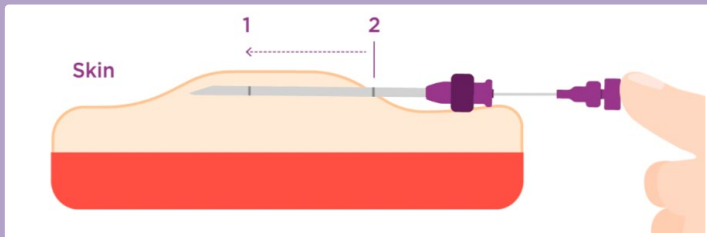
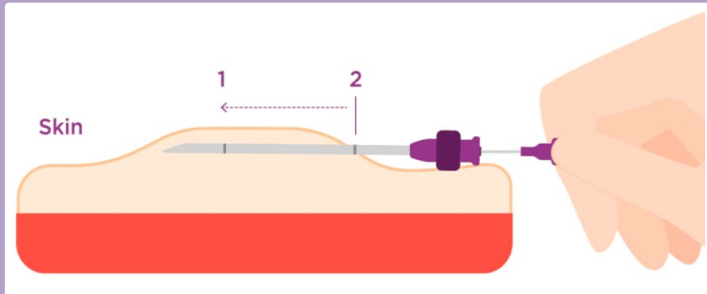
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## *NOTE:*

- Do not force the trocar, and if you feel any resistance, try another direction
- It is important to keep the trocar in the subdermal layer by tenting the skin with the trocar, as failure to do so may result in deep placement of the implants causing a more difficult removal
- Throughout the insertion procedure, the trocar should always be oriented with the bevel up



# Insertion Procedure



11. Remove the plunger when the trocar is advanced under the skin to the second line (2 in the illustration)
12. Load the first implant into the trocar
13. Gently push the plunger to the tip of the trocar with the left forefinger until you feel resistance
14. Hold the plunger steady and **withdraw the trocar to the mark near the tip 1** in the illustration

# Insertion Procedure

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At this point, remember to ...



Keep the plunger  
steady



Do not push the  
implant into the  
tissue



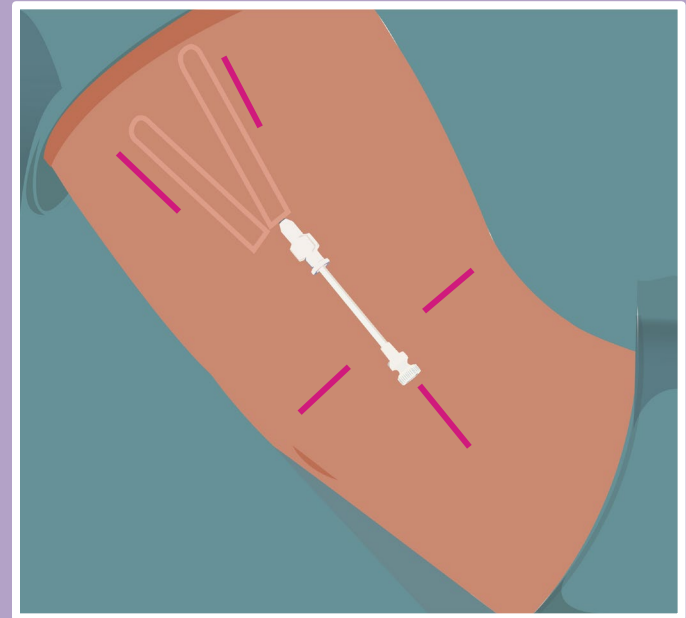
Do not withdraw  
the trocar completely

# Insertion Procedure

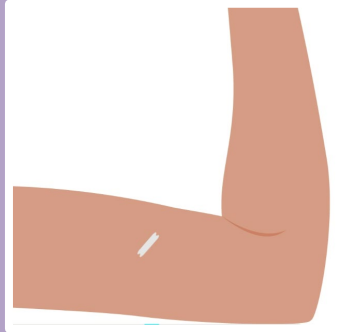
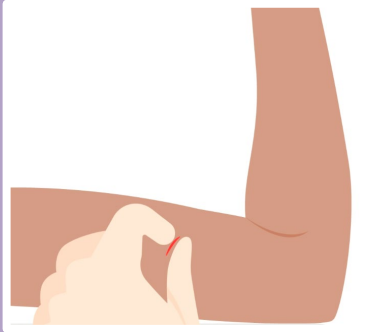
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15. Fix the position of the first implant with the left fore-finger and advance the trocar to form a V shape along the side of the finger. The V should be about a 30-degree angle.

Insert the second implant next to the first one using the same technique from step 10-14



# Insertion Procedure



16. After the insertion, press the edges of the incision together and close with a sterile butterfly adhesive. The arm should be kept dry for a few days
17. Cover the insertion area with a compress and wrap enough gauze around the arm to ensure hemostasis
18. Observe the patient at the clinic for 15 minutes for signs of syncope or bleeding

# Post-Insertion Care

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- Observe client for at least 15 to 20 minutes and ask her how she feels before sending her home
- Discuss what to do if the client experiences any problems following insertion or side effects
- Ask the client to repeat the instructions
- Answer the client's questions



# Management after insertion

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- Be open to patient question
- Practice active listening
- Rule out other causes of any complaints
- Give advice about managing the side effects
- Try medical management before removal first for side effects
- Honor the wishes of the woman
- If removal is chosen, contraceptive and/or pregnancy counseling

# Follow-Up

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“Come back any time”



Assure every client she is welcome to come back any time, for example, when:

- She has problems, questions, or wants another method,
- She has a major change in health status,
- She thinks she might be pregnant.



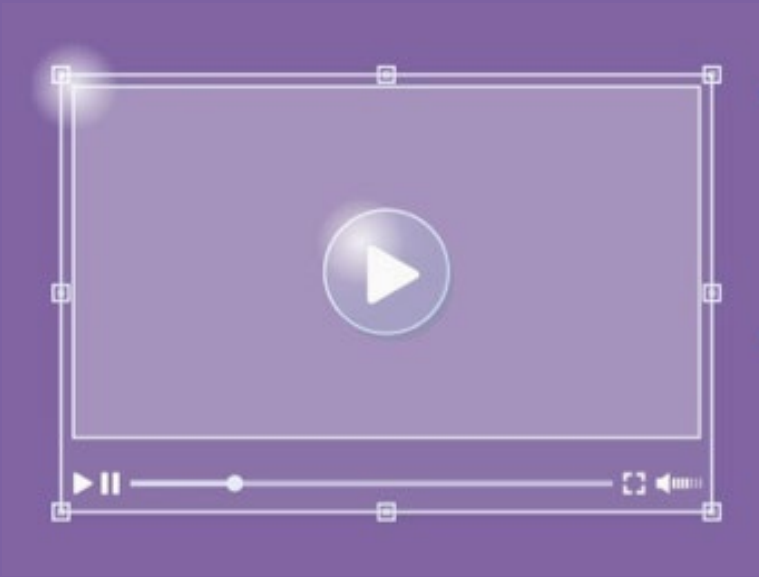
*Remind her to bring the follow-up card  
during each visit to the clinic*

# Warning Signs

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The client should return to the clinic if she has any of the following problems:

- D** Delayed menstrual period after several months of regular cycles (may be a sign of pregnancy)
- I** Infection – pus or bleeding at the insertion side
- S** Severe lower abdominal pain (may be a symptom of ectopic pregnancy)
- C** Capsule (expulsion of a rod)
- U** Unexplained heavy vaginal bleeding (either twice as long/ heavy as normal)
- S** Severe headache – migraine (vascular) headaches, repeated very painful headaches or blurred vision



# Video Tutorial

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Watch the Video. It explains it all.

# Time to practice!

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## 4 Stage method

1

### Stage 1:

Silent demonstration by the trainer in real time without any comments or explanation

2

### Stage 2:

Demonstration by trainer with commentary and explanation

3

### Stage 3:

Demonstration by trainer but this time ask a volunteer trainee provide commentary

4

### Stage 4:

Trainee to perform the skill and provide their own commentary

● Include what happens after insertion

# Module 3

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## Removal of Levoplant™

# Remember:

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## Characteristics of Balanced Counselling In Family Planning



- Remember the Rights Based Approach
- Sexual and reproductive rights
- Communication
- Listen
- Inform
- Clarify doubts

# Remember:

---



Assist the client to make an informed decision,  
based on her needs and wishes!

Ensure method mix for ongoing contraceptive needs  
if required!

Dual protection!



# Before you Begin



Once the client has decided to remove Levoplant™



Counsel client on what to expect, both during and after removal including common side effects



Be clear and concise



Reassure that common side effects are not harmful



Project professionalism, clinical confidence, and receptivity to questions



If possible, also provide printed materials





# Required Equipment

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## For Removal:

- Clean tray
- Gallipot
- Kelly or Crile forceps (5.5" or 14 cm)
- Antiseptic soap and water
- Sterile surgical drapes
- One pair of sterile talc-free gloves
- Antiseptic solution (such as iodine)
- Local anesthetic
- 5 ml syringe with needle
- Sterile gauze
- Scalpel

# Removal Procedure

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- The implants shall be removed very gently, and this may take more time than their insertion
- Implants may sometimes be nicked, cut or broken during removal
  - If removal proves difficult, close the incision and bandage the wound, and have the patient return for another attempt
  - The remaining implant(s) will be easier to remove after the area is healed
  - A hormonal or non-hormonal method of contraception should be used until both implant have been removed

# Removal Procedure

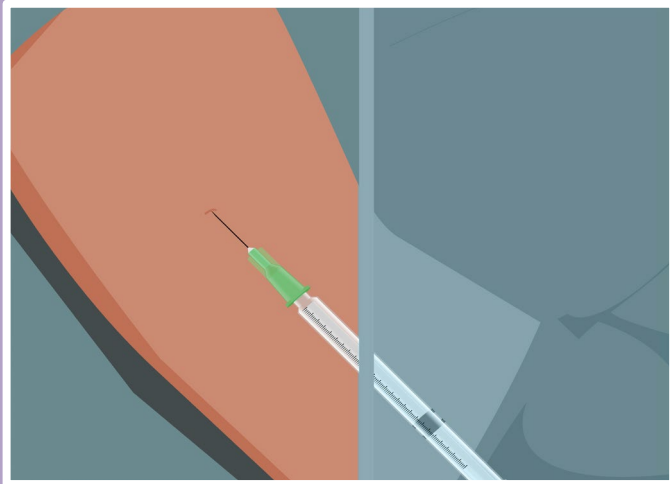
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- The patient shall be in a similar position, and a similar aseptic technique shall be applied as for insertion
1. Locate the implants by palpation, possibly marking their position with a marker pen.



# Removal Procedure

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2. Inject a small amount of local anesthetic under the ends of the implant that are closer to each other – this will raise the ends of the implants.
- Anesthetic injected over the implants may obscure their position and make removal more difficult
  - If necessary, more anesthetic can be given in small amounts at a time

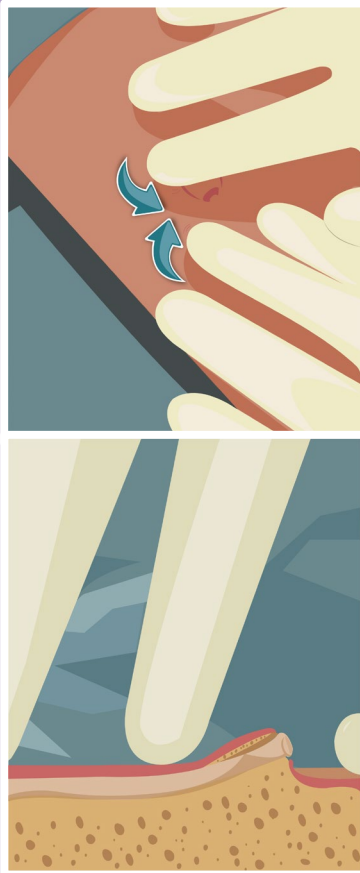
# Removal Procedure

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3. Make a 2-4mm incision with the scalpel close to the ends of the implants (below the bottom of the V)
  - Keep the incision small



# Removal Procedure

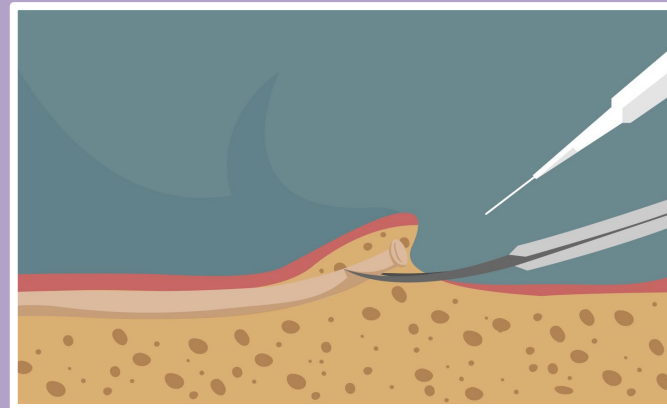
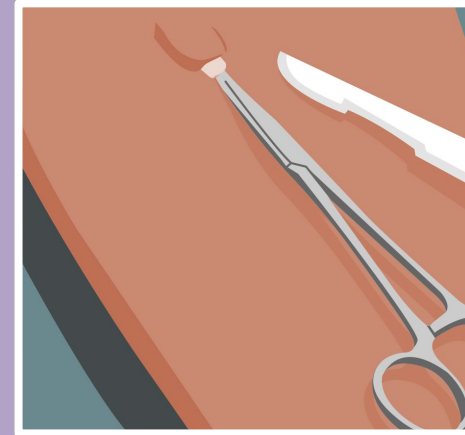


- 4. Push each implant with your fingers gently towards the incision
- 4. When the tip is visible or near to the incision, grasp it with Crile/Kelly forceps. Mosquito forceps can also be used

# Removal Procedure

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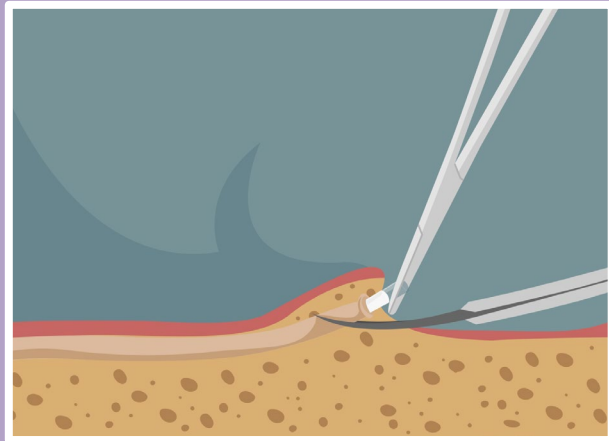
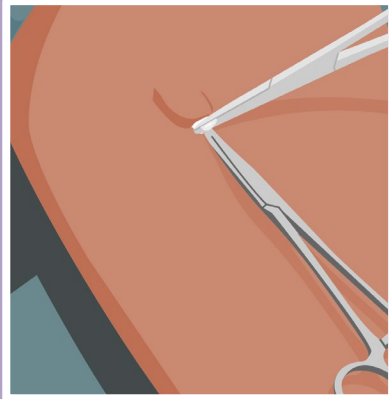
6. Stabilize the implant with the Crile/Kelly forceps. Mosquito forceps can also be used
6. Use a scalpel and very gently open the tissue sheath around the implant





# Removal Procedure

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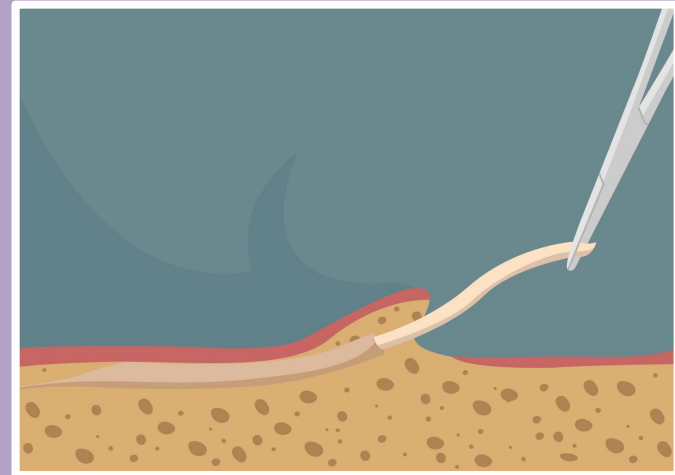
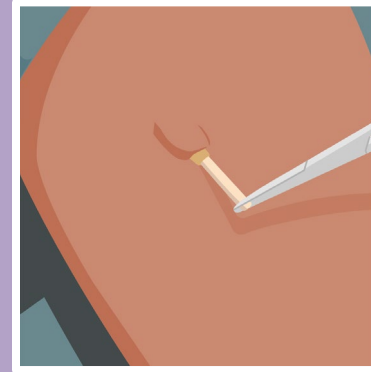


8. Grasp the end of the implant with the second forceps (Crile/Kelly forceps)

# Removal Procedure

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9. Release the stabilizing (first) forceps
10. Use the second forceps holding the end of the implant to gently remove the implant. Do not twist or bend the implant.
  - See the FAQ for guidance on avoiding implant breakage.



# Removal Procedure

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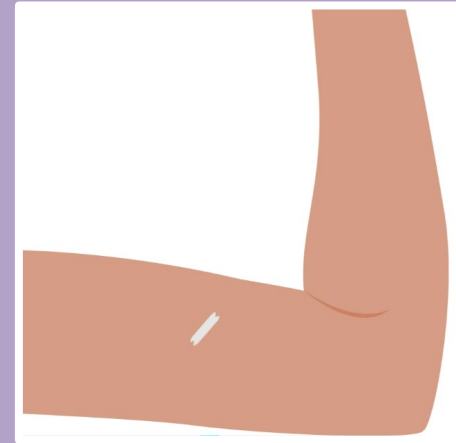
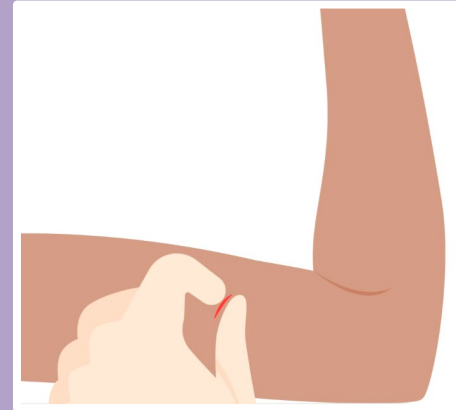


- Repeat the procedure for the second implant

# Removal Procedure

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- After the procedure is completed, close the incision and bandage it as after insertion.
- The arm should be kept dry for a few days



# Removal Procedure

If the woman wishes to continue using the method:

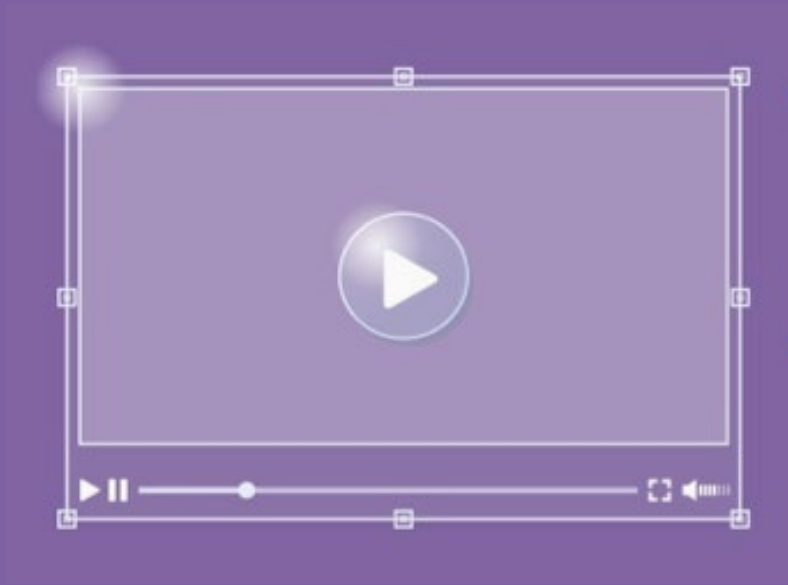
1

A new set of Levoplant™ can be inserted through the same incision, in the same or the opposite direction.

2

If the woman prefers, Levoplant™ can also be inserted in her other arm.





# Video Tutorial

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Watch the Video. It explains it all.

# Time to practice!

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## 4 Stage method

1

### Stage 1:

Silent demonstration by the trainer in real time without any comments or explanation

2

### Stage 2:

Demonstration by trainer with commentary and explanation

3

### Stage 3:

Demonstration by trainer but this time ask a volunteer trainee provide commentary

4

### Stage 4:

Trainee to perform the skill and provide their own commentary

● Include what happens after removal

# Questions, Comments, Or Concerns?



We want to hear about it ...





Email: [contact@dktwomancare.org](mailto:contact@dktwomancare.org)  
[www.dktwomancare.org](http://www.dktwomancare.org)



Creating a world where women are empowered  
to live their lives to the fullest.