



Contraceptive Implants

Eyaya Misgan, MD
Head, Department of Obstetrics and Gynecology
Bahir Dar University

Outline

- Objectives
- Types of Implants
- Mechanism of action
- Advantages and disadvantages
- Eligible candidates
- Timing of insertion
- Insertion procedure
- Complications
- Summary



Objectives

1. Describe the characteristics of implants
2. Apply medical eligibility criteria for implants
3. Explain the insertion, removal, and follow-up procedures
4. Describe when to initiate use of Implants
5. Detect and manage side effects



Case Study

- Almaz is 28 years old and has two children
- She is a first year postgraduate student at the University of Gondar
- She wants you to advise her on the most suitable contraceptive method
- She explained to you that she is worried
 - About the side-effects
 - Wants more children in the future

What is the most suitable contraceptive for Almaz ?



Introduction

- Contraceptive implants are
 - Progestin-based
 - Highly effective
 - Rapidly reversible
- Have been used for more than 25 years
- Consist of flexible tubes or rods of match stick size
- Provide 3 to 7 years of continuous protection
- Ethiopia: the second most common in utilization



Types of Implants

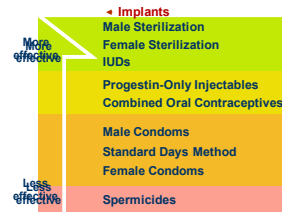
- Based on
- The number of tubes or rods
 - The type of progestin that each releases
 - Radio-opacity

| Name | Progesterone | Number of rods | Duration of use in years |
|-------------------|--------------------|----------------|--------------------------|
| Norplant | 36mg levonogestrel | 6 | 5 |
| Jadelle | 75mg levonogestrel | 2 | 5 |
| Sino-implant (II) | 75mg levonogestrel | 2 | 4 |
| Implanon | 68mg etonogestrel | 1 | 3 |
| Nexplanon | 68mg etonogestrel | 1 | 4 |





Effectiveness of Implants

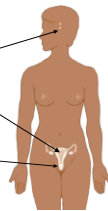


Mechanism of Action

Implants work in two ways

Suppresses hormones responsible for ovulation

Thickens cervical mucus to block sperm



Implants have no effect on an existing pregnancy.



Advantages and Disadvantages

Advantages

- Very safe
- Highly effective (99.95%)
- Easy to use
- Immediate return of fertility
- Can be used by breastfeeding women
- Offer health benefits

Disadvantages

- Side effects
- Require minor surgery to insert and remove
- Need provider's help
- Provide no protection from STIs/HIV



Health Benefits

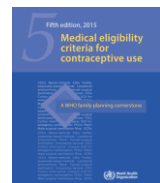
- Reduced risk of
 - Symptomatic pelvic inflammatory disease (PID)
 - Iron-deficiency
 - Ectopic pregnancy
 - 6 per 100,000 in Implant users
 - 650 per 100,000 in women using no contraception

Source: CCP and WHO, 2011; Task Force for Epidemiological Research on Reproductive Health, 1998.



Eligible candidates for implantable contraception

- Most women can use Implants safely
- Most health conditions do not affect safe and effective use
- Many women who cannot use methods that contain estrogen can safely use
- Base on WHO Medical eligibility criteria (MEC)



WHO/MEC (cont'd)

| | |
|------------|---|
| Category 1 | no restriction for the use of the contraceptive method |
| Category 2 | advantages of using the method generally outweigh the theoretical or proven risks |
| Category 3 | the theoretical or proven risks usually outweigh the advantages of using the method |
| Category 4 | an unacceptable health risk if the contraceptive method is used |



Examples

Category 1 and 2

- Adolescent girls
- Postpartum
- Post abortion
- Blood pressure > 160/100 mmHg

Category 3 and 4

- Pulmonary thromboembolism
- History of breast cancer
- Current breast cancer



Timing

- First 7 days of menstrual cycle (5 days for Implanon)
- After 7th day of menstrual cycle (5th for Implanon), rule out pregnancy and use backup method for 7 days
- Postpartum: immediately
- Post abortion: immediately



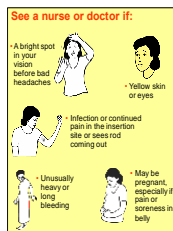
Timing (cont'd)

- Switching from method:
 - Immediately if a hormonal method was used
 - With in the reinjection window for injectable users
- After using emergency contraceptive pills:
 - Insert within 7 days after start of next menstrual period
 - Provide with backup method during interim



What to Remember after Implant insertion

- Keep the insertion area dry for 4 days
- Expect a bit of soreness and bruise
- Side effects are common but rarely harmful
- Come back any time for any problems or concern or want to get pregnant



Insertion Video (Jadelle)



Case study

- You inserted Jadelle for Almaz, she called you after two months that she has vaginal bleeding which comes at irregular intervals
- What is Almaz's diagnosis?
- What do you do for her problem ?



Side effects of Implants

First several months

- Lighter bleeding and fewer days of bleeding
- Irregular bleeding
- Infrequent bleeding
- No monthly bleeding

After about one year

- Lighter bleeding and fewer days of bleeding
- Irregular bleeding
- Infrequent bleeding



Management of unscheduled bleeding

| | Therapy regimen |
|---------------|--|
| First choice | Combined oral contraception taken daily for 21 days followed by a 7-day break. Use for up to 3 months -or- Conjugated estrogens 1.25 mg taken daily for 7 days -or- Ethinyl diol 2 mg taken daily for 7 days |
| Second choice | High-dose cyclic progestin for up to 3 months (medroxyprogesterone acetate 10 mg twice daily or norethisterone 5 mg twice daily for 21 days with a 7 day break) |
| Third choice | Progestin only pills, particularly a desogestrel pill, taken daily for up to 3 months |
| Fourth choice | NSAIDs, especially COX-2 inhibitors, taken daily for 5-10 days |
| Fifth choice | Tranexamic acid 500 mg twice daily for 5 days |



Problems that may require switching from implants

- Unexplained vaginal bleeding
- Migraine headache
- Coagulopathy
- Ischemic heart disease
- Suspected pregnancy

Complications and management

- Infection at insertion site
- Expulsions
- Difficult removal



Prior to Implant Insertion or Removal

Getting ready

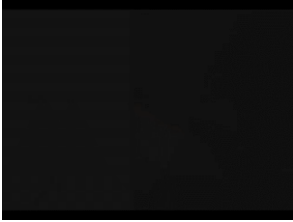
- Have the client wash her arm
- Cover the procedure table
- Prepare a clean instrument tray
- Open the sterile instrument pack

Before insertion/removal

- Wash hands thoroughly and put on gloves
- Clean the insertion/removal site
- Use a sterile drape with a hole over the site
- Use a new disposable syringe and needle



Implant removal (Jadelle)



After Implant Insertion or Removal

- Stop any bleeding with gauze and clean the insertion/removal site
- Apply a sterile adhesive bandage
- Place sharps in a safety container
- Decontaminate instruments
- Dispose of contaminated objects
- Decontaminate all surfaces
- Wash hands with soap



Summary

- Provide long-term protection
- Highly effective and readily reversible
- Appropriate for most women, including young and nulliparous
- Irregular bleeding patterns may be a problem for some women
- Thorough counseling is essential

