

IMPLANTS

KRISHNAPRIYA S B

ROLL NO : 105

Orplant

Nexplanon

Jadelle

Other newer implant

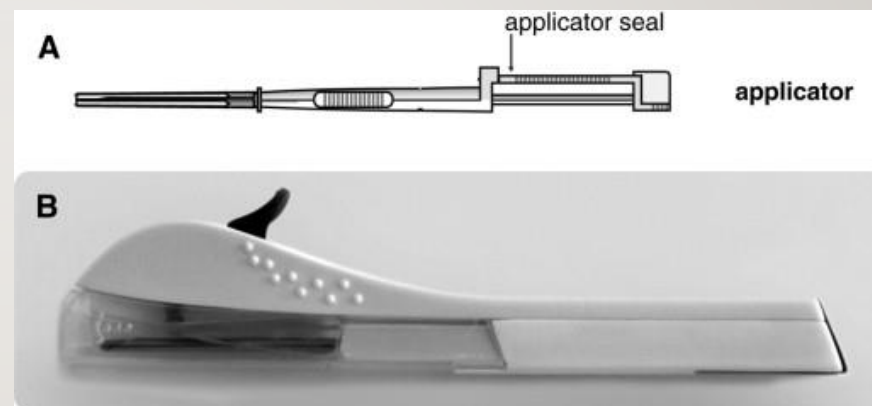
NORPLANT

- Subdermal implant
- Developed by population council of US
- Approved by FDA and IPPF
- Kept for 5 years
- Consist of 6 silastic rods, 34mm long and 2.4mm in diameter
- Each capsule -36mg levonorgestrel
- Release 80 mcg of levonorgestrel per 24 hrs in the first year of use and this decrease to 30 mcg in last 2 years of use
- Inserted subdermally on inner aspect of upper arm



NEXPLANON(IMPLANON)

- Single rod 4cm long and 2mm in diameter
- Contain 68mg of etonogestrel
- Kept for 3 years
- Inserted just under the skin of your non dominant upper arm by a trained health care provider under local anesthesia
- Inserted within first 5 days of menstrual cycle
- If inserted later in cycle backup contraceptive method must be used for 7 days
- Initial release rate is 60mcg per day at the end of 3 years



MECHANISM OF ACTION

Inhibition of ovulation

Action on cervical mucus and endometrium

EFFECTIVENESS

No pregnancies have so far been recorded

SIDE EFFECTS

Irregular bleeding – first 3 mont

Amenorrhoea

Head ache ,acne , emotional liability

BENEFITS

Convenient to use

No interference with sex

High effectiveness

Can be used where estrogen is contraindicated

JADELLE

- LNG rod or Norplant 2
- Consist of 2 rods and contain levonorgestrel
- Approved for 3 years
- Not available in India



OTHER NEWER IMPLANTS

CAPRONOR

- Biodegradable implant
- 4cm long rod containing levonorgestrel in an ϵ -caprolactone polymer
- Effective for 1 year

ST-1435 SINGLE ROD IMPLANT

- Single silastic implant using a new progestogen ST-1435

NESTRONE IMPLANT

- Single rod implant containing nesterone
- Kept for 2 years

NORETHINDRON BIODEGRADABLE PELLETS

Insertion of 4 pellets for a period of 1 year

TRANSDERMAL PATCHES

- Ortho Evra
- Combination of norelgestromine and ethinyl oestradiol
- Not available in india
- Surface area of 20 cu.cm delivers daily dose of 150 microgram of norelgestromine and 20microgram of ethinyl oestradiol.
- For 7 days- three patches for 3 weeks with patch free interval in the 4th week

- Contraindications and side effects are similar to the combined oral contraceptives like nausea, breast tenderness ,weight gain ,hypertension and thrombosis etc.
- Good cycle control is there.
- Main advantage-compliance is better
- Disadvantage- patch detachment



VAGINAL RINGS

- **Nuva Ring**
 - 120 microgram etonogestrel & 15 microgram ethinyl estradiol per day
 - used for 3 weeks with ring free interval of 7 days
 - Regular withdrawal bleeding occur
- **Levonorgestrel Ring**
 - progestogen Ring
 - Lifespan: 3 months
 - release 20 microgram Levonorgestrel per day
- **Nestrone Ring**

OTHER RECENT ADVANCES

Vaccines

- Anti-hCG vaccine
- Zona pellucida vaccine
- LHRH vaccine
- FSH vaccines

Agonists and antagonists

- MIFEPRISTONE- inhibit ovulation 2 mg per daily tried as daily pill and 25 mg tried as a weekly pill and 200 mg may act as once a month pill
- ANORDIN-norandrosterone derivative having strong anti-progestational action , inhibit ovulation

Male hormonal contraception

- Testosterone enanthate injectables
- Testosterone buccalate injectables
- Depo Provera plus testosterone implants
- Oral desogestrel plus testosterone implants
- Male vaccines (FSH, LHRH and antisperm vaccines)



REFERENCES

TEXTBOOK OF GYNAECOLOGY SHEILA BALAKRISHNAN 3RD EDITION

SHAWSTEXTBOOK OF GYNAECOLOGY 7TH EDITION

THANKYOU