

Legal aspects of Reproductive medicine

- **Infertility has been a source of great sadness for married couples since old times .**
- **A better understanding of reproductive physiology , combined with advances in medical technology ,has led to the development of several methods of *assisted reproductive technology (ART)* as:**
 - 1- Artificial insemination (AI)**
 - 2- In vitro fertilization (IVF)**
 - 3- Intra-cytoplasmic sperm injection**

Assisted reproductive technology (ART)

1- Artificial insemination (AI)

2- In vitro fertilization (IVF)

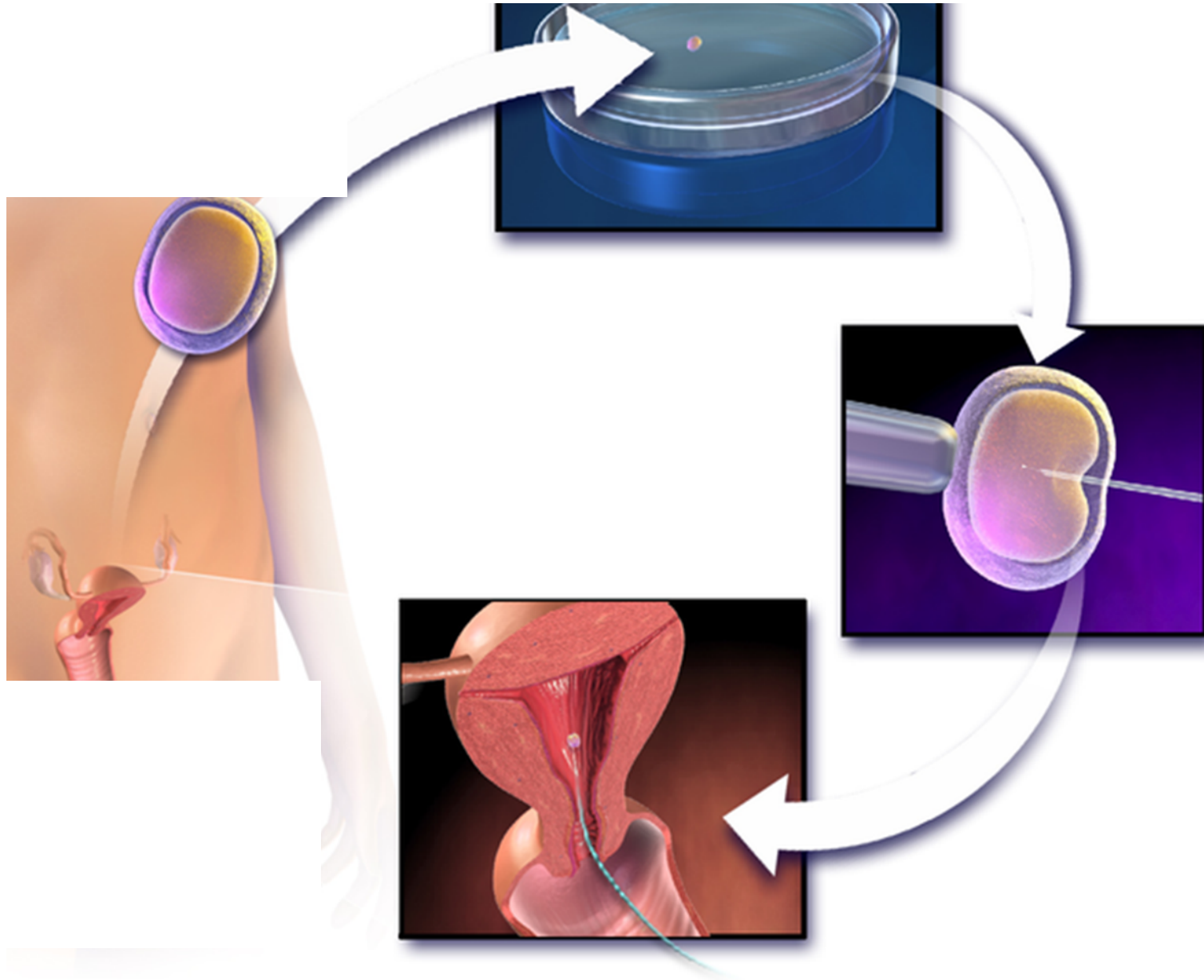
***3- Intra-cytoplasmic sperm
injection***

1. Artificial insemination : AI

- AI is often the best choice of treatment for couples that are infertile due to sperm disorders . It involves injecting sperm through a narrow catheter into the wife's reproductive tract .
- it is of two types , (one **homologous** AIH) consisting of the injection of the seminal fluid of the husband by artificial means into the vagina of his wife to induce conception , and the other **heterologous**: from donor , AID) using the semen of someone other than the husband ie. donor.

- **AIH causes almost no legal problems , since any child born of the procedure is the biologic offspring of the husband and wife.**
- **AID with or without the consent of the husband , is against the public policy , morals and religion . A child so conceived is the child of the mother but not belonging to the father. A legal issue also arises concerning the possibility of **sperm banking** for use by a wife after her husband's death.**

2. In vitro fertilization :IVF



2. In vitro fertilization :IVF

- ***Taken literally , IVF means fertilization in glassware .***
- ***IVF is a procedure that involves taking eggs and sperm from the bodies of the male and female partners and placing them together in a laboratory dish to enhance fertilization . Fertilized eggs are then transferred several days later into the female partner's uterus where implantation and embryo development will hopefully occur as in a normal pregnancy.***

- ***Because of the relatively low success rate of implanting embryos that have been conceived in vitro back into the uterus , it has become a standard practice for clinics to freeze extra embryos for possible later use.***
- ***What happens to the embryos that are not needed ; here is the question .***
- ***Clinical IVF is permitted only between married couples .***

: Legal precautions are

- 1- Consent of both partners .
- 2- The physician should be honest in using the husband's sperms & the woman's ova.
- 3- Legal procedures should be fulfilled in use not the abuse of the remaining parts of semen.
- 4- Fear of disputes of paternity.

3. Intra cytoplasmic sperm injection

- This is the newest form of sperm micro-manipulation procedure performed in the laboratory. It involves the insertion of a single sperm directly into the cytoplasm of a mature ovum , or oocyte , using a micro-injection pipette , or thin glass needle .
- The legal problem arises as regards what will be done with the number of early zygotes which remain frozen and unused after a couple has had successful ART

Abortion

- Abortion may be **spontaneous** or induced. Spontaneous abortion may be due to diseases in the mother or in the ovum itself.
- Of legal importance is the **induced** abortion.

Induced abortion

- May be **therapeutic or criminal** abortion:

Therapeutic abortion :

- It is the expulsion of the contents of a pregnant uterus done under medical supervision to save the life of the mother when the continuation of pregnancy endangers her life.

indications of therapeutic abortion: may be

- 1- General diseases like uncompensated heart disease, uncontrolled diabetes, uncontrolled hypertension or renal failure.
- 2- Local disease like cancer cervix

legal precautions before doing therapeutic abortion

- 1- A written consent should be signed by the woman and her husband.***
- 2- A medical report signed by 2 specialists certifying that the woman's condition cannot tolerate the pregnancy.***
- 3- The operation should be done in a general or maternity hospital.***
- 4- These reports should be kept in the hospital files.***

: Criminal abortion

- **It is that type of abortion performed without any medical indications using general or local violence or by intake of abortifacients.**
- This may endanger the life of the woman because it is done in secrecy and in a hurry.
- The criminal code is accusing any physician who helps a woman for abortion. He is convicted **يحاكم** by prison whether with or without her will.

(2) Medical experiments on humans:



Public awareness of ethical problems posed by medical research on human subject did not coalesce until the **post-World War II trials** at Nuremberg and development of the **Nuremberg Code**.

Later in 1964 the **Declaration of Helsinki** was conceived, these documents adopted ethical guidelines for researches involving humans.

Ethical guidelines for researches involving humans



1. Voluntary **consent** of the human subject .
2. Fruitful results for the **good of society**.
3. Designed and based on the results of **animal experimentation**.
4. Conducted only by **scientifically qualified persons** .
5. The subject is at liberty to **refuse continuation** at any time.

THANK YOU