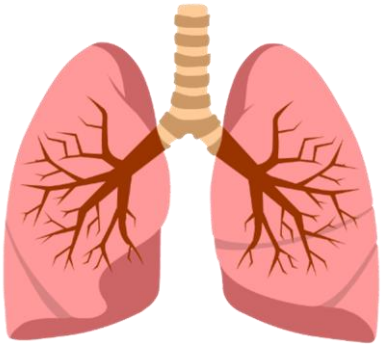
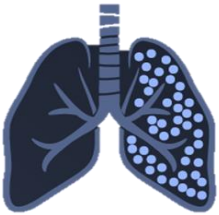
مدينة الملك فهد الطبية
King Fahad Medical City



الوقاية من التليف الكيسي

prevention from cystic fibrosis

Cystic Fibrosis



Is a **genetic disease** that damages the **lungs** and **digestive system**.

Affects the **cells** that produce **mucus**, **sweat**, and **digestive juices**.

The **defective gene** causes secretions to become sticky and thick instead of being thin and slippery, plugging up tubes, ducts and passageways, especially in the lungs and pancreas.

Causes:

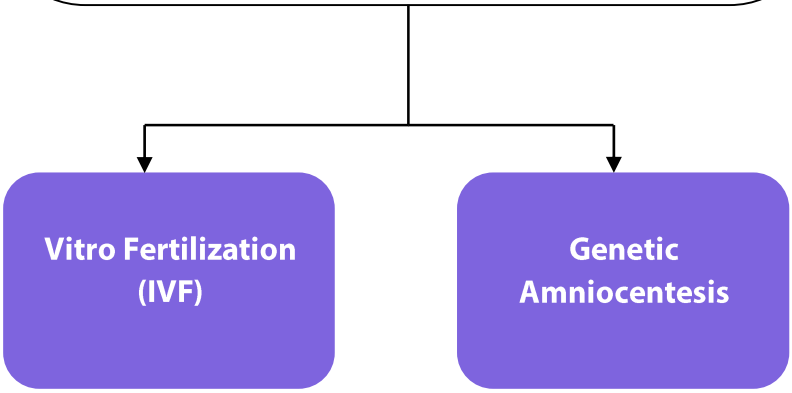
- [ ] Results from a defective CF gene that a child inherits from both parents.
- [ ] Both parents must have at least one copy of the defective gene.
- [ ] A person with one copy of the defective gene is a carrier but he doesn't have the disease.
- [ ] The chance of having a child with cystic fibrosis is (1:4) 25%.

Prevention of Cystic Fibrosis

If both parents have a family history of cystic fibrosis, both may need to undergo genetic testing before having children.

The test helps determine the risk of having a baby with cystic fibrosis.

If they are already carriers of the disease and the genetic test shows that the child may be at risk of developing cystic fibrosis, there are several ways that one can follow one of them to avoid having a child with the disease:



Genetic Amniocentesis:

Genetic amniocentesis is a procedure in which amniotic fluid is taken from the uterus to be tested for conditions, such as cystic fibrosis. Amniotic fluid is the fluid that surrounds and protects the baby during pregnancy. This fluid contains fetal cells and many chemicals produced by the baby.

Genetic amniocentesis provides information about a child's genetic makeup. Generally, genetic amniocentesis is done when test results have a significant impact on the management of the pregnancy, or on the desire to keep it.

Genetic amniocentesis is typically done between weeks 14 and 15 of pregnancy.

How to prepare for the operation

- It is helpful to have the bladder full during the procedure.
- You must drink a lot of fluids before the date scheduled for operation.

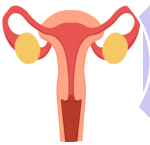
During the operation

- Determining fetus location by ultrasound.
- Insertion of a thin needle through the abdominal wall and into the uterus.
- A small amount of amniotic fluid will be drawn into a syringe.
- The tested person must lie still during the procedure.

After the operation

- It is possible to return to the normal level of activity after the operation.
- strenuous exercise and sexual activity should be avoided for a day or two.

Contact your health care provider in case of:



Loss of vaginal fluid or vaginal bleeding

Severe uterine spasm that lasts for more than a few hours

Fever

Redness and inflammation at the place where the needle was inserted

Abnormal fetal activity or decreased fetal movement

Results:

If the amniocentesis results indicate that the fetus has cystic fibrosis, termination of pregnancy is permissible as stated by the Council of Senior Scholars in Resolution No. (240) on this subject, which states: “Abortion of a malformed fetus before 120 days or prior to ensoulment is permissible if it is certain that he is afflicted with a disease, hereditary or otherwise, with which his life will not continue or continues, Allah willing, but with great suffering and harm, or he has a severe and permanent disability that is not expected to be cured.

IVF

is when a mature egg is collected (retrieved) from ovary and fertilized by sperm in a lab. Then the fertilized egg (embryo) is transferred to a uterus.

The fertilization process for one cycle may take about two weeks.

Why is in vitro fertilization performed?

In vitro fertilization is an appropriate option if the parents are at risk of passing on a genetic disorder such as (cystic fibrosis) to the child.

Preimplantation Genetic Testing

The embryos are left to grow inside the incubator until they reach a stage where a sample is excised and tested for specific genetic diseases such as cystic fibrosis, usually occurring after five to six days of development.

After that, healthy embryos that do not contain diseased chromosomes or genes can be transferred to the uterus.

Embryo Transfer

This operation is typically painless, but the patient may feel mild cramps. She can get some sedatives.

A catheter is inserted into the opening of the vagina and passed through the cervix to be lodged in the uterus.

The embryos are then injected into the uterus through a catheter

If the operation is successful, the embryo is implanted in the uterine lining 10 days after the egg retrieval.

After the embryo transfer, you can return to normal daily activities. But strenuous activities, which can cause discomfort, should be avoided.

After Embryo Transfer

Some minor side effects may occur after the operation, including:

- ✓Clear fluid or bloody discharge shortly after the operation
- ✓Breast pain
- ✓Slight cramps
- ✓Constipation

لأن الوعي وقاية ..

إدارة التثقيف الصحي

Patient Education Department

Pulmonary Section