

Osaro Evelyn princess

18/mhs07/046

IMPLANTATION

Implantation is the process by which the fertilized ovum called zygote implants (fixes itself or gets attached) in the endometrial lining of uterus. After the fertilization, the ovum is known as zygote. Zygote takes 3 to 5 days to reach the uterine cavity from fallopian tube. While travelling through the fallopian tube, the zygote receives its nutrition from the secretions of fallopian tube. After reaching the uterus, the developing zygote remains freely in the uterine cavity for 2 to 4 days before it is implanted. Thus, it takes about 1 week for implantation after the day of fertilization. During the stay in uterine cavity before implantation, the zygote receives its nutrition from the secretions of endometrium, which is known as uterine milk. Just before implantation, the zygote develops into morula and then the implantation starts. A layer of spherical cells called trophoblast cells is formed around morula. Trophoblast cells release proteolytic enzymes over the surface of endometrium. These enzymes digest the cells of the endometrium. Now, morula moves through the digested part of endometrium and implants itself.

What can cause implantation to fail?

Unfortunately, various conditions can hamper the proper implantation of a blastocyst. In some cases, genetic disorders in the developing embryo disrupt the trypsin signal and cause a stress reaction that forces the uterus to reject the blastocyst. Immunological disorders may cause the mother's body to attack the implanting embryo. Ultimately, this is a delicate process, and roughly half of all fertilized eggs fail to successfully implant.

Signs of Successful Implantation

If the embryo successfully implants, you can expect to experience a number of signs or symptoms. Unfortunately, the earliest signs of success can appear like the normal signs of a period: cramps, headaches, fatigue, and bloating. In 20% to 30% of women, implantation bleeding occurs, similar to what they experience during a period. However, if it's implantation and not your period, additional symptoms will follow:

Your breasts may feel sore, tight, or tender.

If you continue tracking your basal body temperature after ovulation, you may notice that your average temperature has increased.

This rise in temperature, combined with fatigue and other symptoms, may make you think you have the flu.

Within a week, you may feel more frequent urges to urinate. This is because increased blood flow to the uterus has put pressure on your bladder.

Of course, the only way to tell if you have had a successful implantation is to take a pregnancy test. If you have any questions, schedule an appointment with your doctor.