

PHYSIOLOGY OF PREGNANCY AND PLANNING FOR A CHILD

Safarova Sevara Chutbayevna

Assistant Lecturer at Tashkent State Medical University

Avezova Salomat Makhmudjonovna

Assistant Lecturer at Tashkent State Medical University

Tursunov Bekhruz Farrukh o'g'li

Student, Faculty of Medicine (Treatment),

Tashkent State Medical University

ABSTRACT

The article discusses aspects of pregnancy physiology and family planning. It covers how a couple should prepare for planning a child. Harmful habits and positive factors during planning and pregnancy are examined.

Keywords: Physiological pregnancy, physiology, pregnant woman, family planning, body, childbirth.

INTRODUCTION

Pregnancy is a stage that involves a number of changes in a woman's body, both physiological and psychological. Pregnancy causes physiological changes in all organs and systems of the mother, most of which resolve after childbirth. Overall, changes are more pronounced in multiple pregnancies. The earliest sign of pregnancy is menstrual cycle disturbance. In sexually active women of reproductive age with regular menstrual cycles, a delay of ≥ 1 week is most likely associated with pregnancy, although other factors may cause secondary amenorrhea. Pregnancy is considered to last: 266 days from conception; 280 days from the first day of the last menstrual period, if cycles occur regularly every 28 days. The estimated due date is determined based on the last menstrual period. Delivery occurring 3 weeks earlier or 2 weeks later than the estimated date is considered normal. Births before 37 weeks are considered premature, and births after 42 weeks are considered post-term [1].

When planning a pregnancy, both the woman and the man should prepare in advance. This includes a comprehensive medical examination, dietary features and vitamins, vaccination against infections, and much more. Preconception preparation (pregnancy planning) helps prevent deficiencies because pregnancy requires a great deal of energy, strength, and nutrient reserves from the female body. At the time when a woman does not yet know she is pregnant, the baby already needs additional vitamins and minerals. For example, to reduce the risk of neural tube defects in the first trimester, it is important to start taking folic acid at least 90 days before conception [2].

Planning a pregnancy should begin not with a visit to a gynecologist and medical tests, but with clear awareness and readiness. Pregnancy itself is only a stage — the result will come after childbirth. A woman should be calm, in harmony with her soul, body, and partner. It is important to remember that if pregnancy does not occur within a year of regular sexual

intercourse, this is normal. Many healthy couples conceive after 3, 4, or even 8 months of attempts. There is no need to panic after the first unsuccessful cycle. In couples with infertility, men often blame women for the absence of children, claiming they are healthy and refusing examination [3]. Meanwhile, women undergo many tests, even surgery, spending money and making every effort to get pregnant, while men sometimes refuse even a simple semen analysis. It is essential to psychologically prepare men for fatherhood and explain that a baby will consist half of their genetic material (50% sperm, 50% egg) [4]. A healthy lifestyle, proper nutrition, absence of stress, and a minimum of three months preparation before conception greatly influence male reproductive health. Alcohol, beer, and drugs should be excluded. Caffeine intake should be reduced. Stress levels should be minimized; often couples conceive during vacations. Adjust physical activity — if training daily, reduce frequency; if sedentary, begin light exercises. Maintain balanced nutrition, normalize weight — both underweight and overweight reduce chances of conception. At least three months before planned pregnancy, women are recommended to take folic acid 400—800 mcg/day. If a woman is uncertain when she will start trying to conceive but plans pregnancy, she may start folic acid now — six months or a year in advance is even better. Testing for folic acid levels is unnecessary as results do not change dosage [5]. Despite general guidelines, vitamins and minerals should not be taken without consultation.

During planning, a woman undergoes testing for IgG antibodies to measles and rubella. If antibodies are absent, vaccination is recommended, since these infections pose severe risks to the fetus. After vaccination, pregnancy must be avoided for one month [6]. If a woman has not had chickenpox, she should also be vaccinated, as adult infection can be severe. A normal pregnancy is a singleton pregnancy without genetic abnormalities or developmental defects, lasting 37–41 weeks, and proceeding without obstetric and perinatal complications. A normal pregnancy can occur spontaneously or after assisted reproductive technologies. Diagnosis is confirmed by visualization of a viable embryo/fetus with a heartbeat and no abnormalities by ultrasound.

Common symptoms in normal pregnancy: Nausea and vomiting occur in one-third of pregnancies. In 90% of cases they are physiological, and only 10% are complications. Vomiting in normal pregnancy occurs no more than 2–3 times per day, usually fasting, and does not disrupt overall condition. Symptoms usually resolve by 16–20 week [7].

Mastalgia is a normal symptom in the first trimester due to hormonal changes causing breast swelling. Lower abdominal discomfort may be normal due to uterine ligament stretching. Heartburn occurs in 20–80% of pregnancies, usually in the third trimester due to relaxation of the lower esophageal sphincter and increased abdominal pressure.

Constipation occurs in 30–40% of pregnancies, associated with progesterone increase and decreased motilin, causing slowed intestinal transit. Hemorrhoids occur in 8–10% due to pelvic congestion and pressure [8].

Varicose disease develops in 20–40% of pregnant women. The cause of varicose disease during pregnancy is an increase in venous pressure in the lower extremities and the relaxing effect of progesterone, relaxin, and other biologically active substances on the venous vessel wall [8]. Vaginal discharge without itching, pain, odor, or urinary symptoms is normal. Back pain during pregnancy occurs with a frequency of 36% to 61%. Among women experiencing back

pain, 47–60% report the onset of symptoms during the 5th–7th month of pregnancy. The most common cause of back pain in pregnancy is the increased load on the spine associated with abdominal enlargement and a shift in the center of gravity, as well as reduced muscle tone under the influence of relaxin. The prevalence of pubic symphysis pain during pregnancy is 0.03–3% and typically occurs in the later stages of pregnancy.

Carpal tunnel syndrome during pregnancy occurs in 21–62% of cases as a result of compression of the median nerve in the carpal tunnel and is characterized by tingling sensations, burning pain, numbness in the hand, as well as decreased sensitivity and motor function of the hand. First of all, it is important to understand that during pregnancy there is a sharp increase in hormone levels and a deterioration in blood circulation in the body [7]. This is the main reason for most of the unpleasant symptoms that pregnant women experience throughout the nine months, as the body creates the necessary conditions for carrying a new life.

Pregnancy is not the best time for dieting, as a lack of nutrients can negatively affect the baby's health. If weight gain is within the recommended range, a pregnant woman should not feel guilty about eating well. Meals should be divided into small portions, eaten every two hours, and adequate hydration should be maintained in order to stay energetic throughout the day. It is important to say “no” to unhealthy foods and “yes” to proper nutrition. Although it is acceptable to treat yourself and satisfy cravings, attention must be paid to the quality of food consumed. Remember that you are laying the foundation for your baby's development. Include fresh fruits, raw vegetables, and healthy snacks in your diet to keep your baby nourished. A daily evening walk in the park or practicing prenatal yoga can help not only control weight gain but also maintain a positive mindset. However, any physical exercise during pregnancy should only be started after consulting with a gynecologist [9].

For those who wonder whether stretch marks will ever disappear, it is worth remembering that scars are a symbol of pride and a warrior's honor! Although stretch marks may not completely fade, they can be significantly managed. To begin with, creams for stretch marks can be used starting from the second trimester of pregnancy [10]. The good news is that pregnancy hormones provide a natural glow, meaning there is no need for extra effort to look and feel beautiful.

Since pregnancy is a step toward expanding the family, it makes sense to involve relatives and loved ones in this process. Pregnant women who receive support at home and at work have a healthier prenatal experience and better postpartum recovery. Use these ideas to involve your loved ones in the pregnancy journey. Creating a tiny human being is no easy task. To provide the best care for the baby, maintaining a positive mindset is just as important as healthy nutrition and an active lifestyle.

REFERENCES

1. Barabash N.A. The Female Body During Pregnancy: Extragenital Changes (Literature Review) / N.A. Barabash, O.L. Barabash, S.V. Kalantyeve // Bulletin of the Russian Academy of Medical Sciences. No. 2, 2015.
2. Borisenkov E.P. Climate and Human Health / E.P. Borisenkov, V.N. Karpenko // Leningrad: Gidrometeoizdat, 2018.

3. Romanova A.A. Morphofunctional Characteristics of the Placental Vascular Bed in Female Residents of the Far North During Physiological and Pathological Pregnancy. Abstract of dissertation. Yekaterinburg, 2020.
4. Ishekova N.I. Physiological Characteristics of Women with Altered Body Mass in the Conditions of the European North. Arkhangelsk, 2014.
5. Kadochnikova N.I. Physiological Characteristics of Girls Aged 17–19 with Different Menstrual Cycle Durations. Abstract of dissertation. Kirov, 2013.
6. Buronova S.T. Physiological Characteristics of the Female Body. Nevoinnskiy State Pedagogical Institute // Economics and Society, No. 2(93), 2022. URL: <http://www.iupr.ru/>
7. <https://elibrary.sammu.uz/uploads/books/Rus%20tilidagi%20adabiyotlar/%D0%90%D0%BA%D1%83%D1%88%D0%B5%D1%80%D1%81%D1%82%D0%B2%D0%BE%20%D0%B8%20%D0%B3%D0%B8%D0%BD%D0%B5%D0%BA%D0%BE%D0%BB%D0%BE%D0%B3%D0%B8%D1%8F/%D0%90%D0%BA%D1%83%D1%88%D0%B5%D1%80%D1%81%D1%82%D0%B2%D0%BE%2C%20%D0%A1%D0%B0%D0%B2%D0%B5%D0%BB%D1%8C%D0%B5%D0%B2%D0%B0%2C%202015.pdf>
8. <https://nsportal.ru/npo-spo/zdravookhranenie/library/2016/01/29/metodicheskoe-posobie-fiziologiya-beremennosti>
9. <https://gorzdrav.spb.ru/article/content/zdorovaya-beremennost/fiziologiya-beremennosti>
10. <https://diseases.medelement.com/disease/%D0%B2%D0%B5%D0%B4%D0%B5%D0%BD%D0%B8%D0%B5%D1%84%D0%B8%D0%B7%D0%B8%D0%BE%D0%BB%D0%BE%D0%B3%D0%B8%D1%87%D0%B5%D1%81%D0%BA%D0%BE%D0%B9%D0%B1%D0%B5%D1%80%D0%B5%D0%BC%D0%B5%D0%BD%D0%BD%D0%BE%D1%81%D1%82%D0%B8/13644>