DERMATOSES OF PREGNANCY: CLASSIFICATION, DIAGNOSIS AND TREATMENT

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Pregnancy is associated with complex endocrinological, immunological, metabolic, and vascular changes that may influence the skin in various ways. Skin changes in a pregnant woman can be classified as physiological conditions, general dermatoses, and specific pregnancy-related dermatoses.

Physiological skin changes associated with pregnancy: pigmentation, changes in connective tissue, vascular changes, changes in the intensity of sweating, changes in the oral mucosa, effects on hair growth, changes in nails [1]. Causes of skin changes during pregnancy are associated with the production of a series of hormones and fetoplacental unit, maternal pituitary, thyroid and adrenal glands. The level of progesterone in the last week of gestation is 7 times, estradiol – 130 times, and the level of prolactin is 19 times higher than at the 8th week of pregnancy. There is an increase in humoral immunity and a delay in the growth of cellular immunity. An imbalance between the cellular and humoral immunity is designed to prevent fetal rejection [6].

Candidiasis can progress during pregnancy, half of newborns from sick mothers have signs of infection. Skin malassesiosis occurs more often during pregnancy. More common symptoms of HSV infection (vertical transmission is possible) [2].

Systemic lupus erythematosus (SLE) in the remission phase does not progress during pregnancy, if SLE is in the active phase – worsening of the disease [2]. Sclerodermia usually improves during pregnancy. Lichen sclerosus does not usually interfere with becoming pregnant, or having a vaginal birth. Due to hormone changes, some women notice an improvement during pregnancy. Dermatomyositis proceeds without changes.

Porphyria cutanea tarda, acrodermatitis enteropathica as a rule shows biochemical and clinical impairment [3]. Hydradenitis and Fox-Fordice disease becomes better as a result of decreased apocrine glands activity [2].

The course of psoriasis can either improve or worsen during pregnancy. Psoriatic arthritis always gets worse.

Melanoma that develops during pregnancy has a poor prognosis. If pregnancy occurs after tumor resection, the prognosis is good. The course of neurofibromatosis worsens, manifestation may occur, the risk of vascular rupture [2].

Dermatoses of pregnancy represent a heterogeneous group of inflammatory skin diseases related to pregnancy and/or the postpartum period [4]. Whereas some dermatoses are distressing only to the mother because of severe pruritus, others are associated with fetal risks including fetal distress, prematurity, and stillbirth.

A new classification of these specific dermatoses of pregnancy has been proposed that includes the following diseases: atopic eruption of pregnancy (AEP), polymorphic eruption of pregnancy (PEP), pemphigoid gestationis (PG), intrahepatic cholestasis of pregnancy (ICP) [5].

In 75% of cases of AEP the clinic develops before the 3rd trimester. No risk to mother or fetus. AEP is usually a diagnosis of exclusion. Differential diagnosis with intrahepatic cholestasis of pregnancy, scabies and drug allergies.

Treatment is symptomatic: topical steroids, antihistamines and emollients [5].

The frequency of PEP is 1 in 160 pregnancies. It is observed at the end of the 3rd trimester or immediately after childbirth. The risk of PEP is higher with multiple pregnancies and rapid weight gain. Urticarial papules and plaques on the abdomen are typical. The rash may spread to the thighs and buttocks. There may be bubbles of 1-2 mm. Unlike pemphigoid of pregnant women the umbilical region is not affected, blisters are not observed. No risk to mother or fetus. May regress spontaneously within 4-6 weeks without treatment. Treatment is symptomatic: topical steroids, antihistamines [1, 4 ,5].

Frequency of PG is 1 in 2,000 - 1 in 6,000 pregnancies. Develops in the 3rd trimester. 75% have an exacerbation during childbirth. PG resolves spontaneously within a few months after delivery. Initially, papules and plaques are characteristic, which are transformed into vesiculobullous elements. Eruptions appear in the navel area with subsequent spread to the chest, back and limbs. The palms and soles may be involved. The face is not affected, but the mucous membranes may be. Characterized by relapses in subsequent pregnancies, with an earlier onset and severe course. Carries a risk to the fetus

due to the transfer of antibodies through the placenta. Treatment for PG should be aimed at reducing itching and blistering. In mild cases, topical corticosteroids and antihistamines are effective. In severe bullous PG, it is advisable to use systemic corticosteroids [7].

The frequency of ICP is 10-150 cases per 10,000 pregnancies, more common in South America and Scandinavia, probably due to dietary factors. It is manifested by sudden itching of the palms and soles, then the itching is generalized. Skin lesions secondary to pruritus (excoriations, may be papules). Jaundice in 20% of cases. Diagnosis – elevated levels of bile acids. Hyperbilirubinemia only in the most severe cases, about 10-20%. Liver function tests may be normal in 30%. Possible fetal complications include preterm birth, fetal distress, and fetal death. Treatment with ursodeoxycholic acid (UDCA) is recommended. Antihistamines, S-adenosyl-L-methionine, dexamethasone may be used. Cholestyramine can cause vitamin K deficiency regardless of the presence of ICP and hence should be avoided [1]. Criteria for diagnosing cholestasis of pregnancy: itching that occurs during pregnancy in women who have not had hepatitis; generalized pruritus with and without jaundice; no primary skin lesion; itching on palms and soles; changes in biochemical parameters corresponding to cholestasis; rapid relief of itching after childbirth; recurrence of itching during the next pregnancy [1, 5].

Additionally, it should be discussed pustular psoriasis of pregnancy (Hebra's impetigo herpetiformis), witch occurs acutely as erythematous plaques covered with subcorneal pustules on flexion surfaces. The rash is accompanied by itching and pain, erosions of mucous membranes, onycholysis. When resolved, vegetative plaques, papules are formed. There may be convulsions, delirium due to lack of calcium.

The complications of pustular psoriasis of pregnancy: erythroderma (fluid and electrolyte imbalance, impaired thermoregulation, hypoalbuminaemia, maternal sepsis, death due to cardiac or renal failure); placental insufficiency

(intrauterine growth retardation, miscarriage/stillbirth). The outcome of the disease can be fatal: associated with preterm birth, placental insufficiency, premature rupture of membranes, fetal death. The possibility of early induction of labor is being considered. Treatment: the appointment of infusion therapy and corticosteroids in doses of 60-90 mg of prednisolone per day. With inefficiency – cyclosporine 5-10 mg/kg per day. Some suggest calcium supplements, methotrexate, sulfones. After delivery – remission, relapses – in subsequent pregnancies [8].

Knowledge and understanding of skin changes during pregnancy will allow you to choose the optimal tactics for supervising a pregnant woman, treating and preventing complications.

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