

## Optimization of Early Diagnosis And Prevention of Itchy And Non-Itchy Dermatoses of Pregnant Women

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**ANNOTATION:** This protocol summarizes currently available clinical evidence, good practice and expert opinion. Recommendations include materials from leading organizations. Adaptation to local conditions has been carried out. A key requirement in the development of the protocol, which incorporates evidence based on international best practice, was the use of the best guidelines on the subject, as well as a rigorous selection methodology of scientific evidence to formulate recommendations. ICD - 10. O 26.8. Polymorphic dermatosis of pregnant women (polymorphic rash of pregnant women, toxic erythema of pregnant women, pruritic urticarial-papular and plaque dermatosis of pregnant women, polymorphic eruption of pregnancy - PEP, pruritic urticarial papules and plaques of pregnancy - PUPPP) is the most common. a form of dermatosis observed only in pregnant women. The average age of patients is 27 years.

**Key words:** Laboratory studies, Physical examination, Anamnestic data, Etiology and epidemiology, Classification.

### Introduction

The frequency of the disease is on average 1 case in 160 (120-240) pregnancies, two-thirds of cases are observed during the first pregnancy and are often combined with polyhydramnios. However, with multiple pregnancies, the risk increases 8-12 times. The age of pregnant women does not affect the likelihood of dermatosis.

The cause of the disease has not yet been determined, because striae often appear before the onset of the disease, because there is a connection between the increase in dermatosis during pregnancy and excessive stretching of the abdominal skin, the male gender of the fetus; , a decrease in the level of cortisol in the blood serum and some other factors. In 76% of cases, dermatosis is observed during the first pregnancy. It is often combined with polyhydramnios. Etiology and pathogenesis are not fully understood. Perhaps, the onset of the disease at the end of pregnancy is associated with the tension of the abdominal muscles and skin (connective tissue structures) (maximum damage of connective tissue fibers, acquisition of antigenic markers, stimulation of immune inflammation, etc.) can be liq. ) during

this period, polymorphous dermatosis of pregnant women can occur due to the reaction of the mother's body to paternal antigens expressed by the fetal part of the placenta.

There are no data indicating an autoimmune process in polymorphic dermatoses of pregnant women. The frequency of HLA alleles in patients is the same as in the control group. The process often develops in obese women, with a large fetus or multiple pregnancies.

Subjective symptoms: itching of varying intensity, usually appears at the end of the third trimester of pregnancy or immediately after delivery.

Objective symptoms: Rashes with this pathology, as the name suggests, are characterized by polymorphism: most often they are urticarial papules and plaques, and in about half of patients, small bubbles (seropapules) and even single small bubbles may appear. Later, the main elements turn into scales, crusts and unstable hypopigmented spots; There is no scar.

Localization is usually located on the skin of the abdomen, and the location of the rash elements on the surface of the tension line ("stretch marks") is very characteristic; Koebner's phenomenon is very often detected. Unlike the rash of pemphigoid of pregnancy, the skin of the periumbilical region is usually not affected. The rash can spread to the buttocks, thighs, lower back, chest area, and upper limbs. Damage to the scalp and mucous membranes is not characteristic. The rash lasts for an average of 3-6 weeks, the maximum severity of the manifestations is observed in the first week of the appearance of the rash. Usually the rash goes away on its own without any consequences for the pregnant woman and the fetus. Elements of the rash. Red papules with a diameter of 1-3 mm, which quickly merge into large blister-like plates. Plates have a polycyclic shape; In 40% of cases, vesicles with a diameter of 2 mm are formed. Target-like elements - in 19% of patients. There are no bubbles. Despite itching, excoriation is rare. The color of the elements is red and surrounded by a dim rim. The skin around the navel is usually not affected. PDB does not pose a risk to the fetus. There are no related complications during pregnancy and childbirth. Recurrences in subsequent pregnancies are rare. Newborn babies do not have rashes. If blisters and blisters appear, direct immunofluorescence should be done to rule out herpes gravidarum.

### **Methodology**

Complaints: itchy urticarial papules and plaques appear primarily in the abdomen and, unlike BE, do not affect the umbilical region. The rash usually spreads to the thighs and buttocks and is rarely generalized.

### **Results**

Physical examination

- assessment of itching intensity using a scale system (0-4 points)

4C - corneometric study of skin hydration

- dermoscopic examination

Laboratory studies

4C The amount of immunoglobulin E and eosinophils in the blood can be evaluated to assess the background of allergies.

4C To make a differential diagnosis with mycoses, microscopic examination of scrapings from the elements of the rash is carried out.

Instrumental examination

During histological examination, perivascular infiltrates of lymphocytes, histiocytes and eosinophils are observed in the superficial and middle layers of the skin with swelling of the dermis at the beginning of PDB. Late stages of PDB are characterized by epidermal spongiosis. The histological picture is similar to pemphigoid of pregnancy.

#### Differential diagnosis

Itchy urticaria papules and plaques of pregnancy are diagnosed clinically. Differential diagnosis with other dermatoses can be difficult. Early lesions in urticarial papules and plaques of pregnancy usually appear in the area of stretch marks in the abdomen. There are no vesicles or deposits of immune complexes at the border of the epidermis and dermis. Formerly known as herpes gravidarum

Pemphigoid gravidarum (PP) is the rarest skin disease of pregnancy and is an autoimmune disease with antibodies against the NC16A region of PB collagen at a frequency of 1:2000 to 1:60,000. XVII (BPAG2, BP180), in addition to the basement membrane of the skin, is present in amniotic, placental, and umbilical cord tissues. Antibodies activate the complement cascade with inflammation and blistering. BE initially manifests as papules and plaques, which turn into vesiculobullous elements. There is an association between the disease and HLADR3 and HLA-DR4. IgG4 antibodies are detected. Women with this condition have a higher risk of autoimmune diseases, especially Graves' disease. BE is characterized by the appearance of a rash in the umbilical region that spreads to the chest, back, and limbs. The palms and soles may be involved, but usually the mucous membranes, not the face. Most often, the rash develops in the third trimester. Dermatitis is present during pregnancy, and in 75% of patients, exacerbation occurs during childbirth. BE usually goes away on its own within a few months after birth. Usually, there is a recurrence of dermatosis during the next pregnancy, with an earlier onset of dermatosis and a greater severity compared to the previous pregnancy. In addition, there are reports of exacerbation during menstruation or when using oral contraceptives. An increase in premature births, especially in more severe cases, with the onset of blisters and dermatosis before the third trimester. About 10% of children develop a temporary bullous rash due to the passage of antibodies across the placenta. Histologically, bullous pemphigoid is characterized by skin edema and perivascular inflammation with lymphocytes, histiocytes, and eosinophils. Subepidermal vesicles are observed in vesiculobullous lesions with a predominance of eosinophilic infiltrates.

Direct immunofluorescence shows linear deposition of complement 3 (C3) along the basement membrane zone in all patients. Some patients also have IgG deposits along the basement membrane. Enzyme-linked immunosorbent assay (ELISA) can detect specific antibodies against collagen XVII, which is related to disease activity and can be used to monitor the effectiveness of treatment. Treatment of PG should be aimed at reducing itching and blistering. In mild cases, topical corticosteroids and antihistamines are effective. In severe cases of bullous PG, systemic corticosteroids are recommended. Once adequate control is achieved, the dose can be reduced, but it is often not reduced because of the high risk of exacerbations. The use of systemic corticosteroids does not increase the risk to the fetus.

Atopic dermatitis of pregnancy (ADP) is the most common skin disease in pregnant women, accounting for almost 50% of all dermatoses. It also goes by other names, including prurigo gravidarum, prurigo gravidarum, Spangler's papular dermatitis of pregnancy, pruritic folliculitis of pregnancy, and eczema of pregnancy. DBA is a benign condition characterized by an itchy, eczematous, or papular rash. Unlike other dermatoses of pregnancy, it develops until the third trimester. Two-thirds of DBA cases are characterized by localized eczematous skin changes in atopic areas of the body, such as the flexor surface

of the neck and extremities. The remaining cases are characterized by a papular rash on the abdomen and limbs. Lesions usually respond well to treatment and resolve spontaneously after delivery. However, DBA may recur in subsequent pregnancies. Dermatositis does not significantly affect the fetus, but the risk of developing atopic dermatitis in the baby increases.

It is believed that the development of DBA begins with pregnancy-related immune changes in the body. In this case, there is a shift to humoral immunity with increased Th2 activation. Pregnant women with DBA are prone to atopic dermatitis, but 80% of such pregnant women develop these skin changes for the first time during pregnancy. Often relatives have a family history of atopic dermatitis.

DBA is usually a diagnosis of exclusion because the diagnostic test is not specific. 20-70% of patients have elevated serum IgE levels. DBA is different from ICP, scabies, and drug allergy. The main method of treatment is topical corticosteroids. In severe cases, a short course of systemic corticosteroids and antihistamines may be used. Phototherapy can also be used.

Intrahepatic cholestasis of pregnancy (ICP). ICP, formerly known as obstetric cholestasis, cholestasis of pregnancy, and jaundice of pregnancy, is probably reversible cholestasis due to hormonal changes during late pregnancy in predisposed women. ICP is characterized by an acute onset of itching, which often begins on the palms and soles and then becomes generalized. The skin mainly has secondary lesions, such as excoriations, but papules may also be present. In 10%, jaundice develops due to extrahepatic cholestasis. After giving birth, the itching will disappear within a few weeks. There is a risk of recurrence in subsequent pregnancies and when using oral contraceptives. Diagnosis of ICP is very important because ... can have serious consequences. Possible fetal complications include preterm birth, intrauterine fetal distress, and intrauterine fetal death. The frequency of complications in the fetus is related to the total level of bile acids in the mother's blood serum. In cases of severe ICP complicated by jaundice, there is a risk of bleeding in the mother or fetus due to impaired absorption of vitamin K. Severe pruritus in ICP is associated with an increase in the level of bile acids in the blood as a result of impaired secretion, multifactorial. a process caused by genetic diseases, environmental factors and endogenous hormones. In multiple pregnancies, there is a high level of ICP. ICP is diagnosed based on the detection of high levels of bile acids. Hyperbilirubinemia is observed only in the most severe cases, approximately 10-20%, and liver tests may be normal in 30%. Histology is unspecific and immunofluorescence is negative.

Treatment is aimed at normalizing serum bile acid levels to reduce risk to the fetus and control maternal symptoms. Treatment with ursodeoxycholic acid is recommended. Antihistamines, S-adenosyl-L-methionine, and dexamethasone can be used to reduce itching. Anion exchange resins such as cholestyramine may cause vitamin K deficiency regardless of the presence of ICP and should therefore be avoided.

Erythema exudative multiforme (EME) ICD-L 51 occurs mainly in young and middle-aged people. This may be related to the sensitivity of the body to various drugs or may develop against the background of certain infectious diseases. In the first case, they talk about the toxic-allergic (symptomatic) form of MEE, and in the second - the infectious-allergic (idiopathic) form. Toxic-allergic variants of MEE account for only 20% of all cases of the disease, most of which are associated with exposure to infectious agents. About 70% of patients have a chronic infection (sinusitis, chronic tonsillitis, otitis, pulpitis, periodontal disease, pyelonephritis, etc.) and increased sensitivity to bacterial antigens. In such patients, during the exacerbation of the disease, a decrease in T-cell immunity is detected. In this regard, it is

assumed that the occurrence or exacerbation of MEE is related to the immune deficiency that develops rapidly against the background of focal infection under the influence of provoking factors such as hypothermia, ARVI and tonsillitis. In most cases, MEE is associated with a herpes infection. The reason for the development of the toxic-allergic form is intolerance to drugs: barbiturates, sulfonamides, tetracycline, amidopyrine, etc. It can also appear after vaccination or the use of serum. In addition, from the point of view of allergology, the disease is a mixed type of hyperreaction, which combines symptoms of delayed and immediate hypersensitivity. Symptoms of MEE The infectious-allergic version of MEE has an acute onset of general malaise, headache, fever, muscle pain, arthralgia, and sore throat. After 1-2 days, rashes appear against the background of general changes. In about 5% of cases, they are localized only in the oral mucosa. Damage to the skin and oral mucosa was noted in 1/3 of patients. In rare cases, MEE occurs on the genital mucosa. After the appearance of the rash, the general symptoms gradually disappear, but may last up to 2-3 weeks. With MEE, the skin rash is mainly located on the back of the feet and hands, on the palms and soles, on the extensor surfaces of the elbows, wrists, knees and calves, and in the genital area. They are represented by flat, swollen papules of red-pink color with clear borders. Papules quickly increase from 2-3 mm to 3 cm in diameter. Their central part sinks and becomes bluish in color. Blisters with serous or bloody content may appear in it. The same blisters appear on seemingly healthy skin. The polymorphism of rashes is associated with the simultaneous presence of pustules, spots and blisters on the skin. The rash is usually accompanied by a burning sensation, and sometimes itching. When the mucous membrane of the oral cavity is damaged, MEE elements are located in the area of the lips, palate and cheeks. At the beginning, they appear as areas of limited or diffuse redness of the mucous membrane. After 1-2 days, blisters appear in the areas of MEE, which open and form erosion after 2-3 days. Combined with each other, erosion can cover the entire oral mucosa. They are covered with a gray-yellow coating, their removal causes bleeding.

### Conclusion

The study conducted by Khusanova on the optimization of early diagnosis and prevention of itchy and non-itchy dermatoses of pregnant women contributes significantly to the understanding of polymorphic dermatoses in this demographic. Highlighting the prevalence and classification of various pregnancy-related dermatoses, the findings underscore the importance of early diagnosis to alleviate discomfort and prevent severe manifestations. The study's implications stress the necessity for obstetricians and dermatologists to collaborate closely to enhance patient outcomes through better recognition and management of these conditions. For future research, investigating the underlying immunological mechanisms and potential genetic predispositions could further elucidate the pathogenesis of these dermatoses, providing a foundation for developing targeted therapies and improving preventative strategies.

### References

1. Andryev S. et al. Experience with the use of memantine in the treatment of cognitive disorders //Science and innovation. – 2023. – T. 2. – №. D11. – C. 282-288.
2. Antsiborov S. et al. Association of dopaminergic receptors of peripheral blood lymphocytes with a risk of developing antipsychotic extrapyramidal diseases //Science and innovation. – 2023. – T. 2. – №. D11. – C. 29-35.
3. Asanova R. et al. Features of the treatment of patients with mental disorders and cardiovascular pathology //Science and innovation. – 2023. – T. 2. – №. D12. – C. 545-550.



4. Begbudiyeв M. et al. Integration of psychiatric care into primary care //Science and innovation. – 2023. – T. 2. – №. D12. – C. 551-557.
5. Bo'Riyev B. et al. Features of clinical and psychopathological examination of young children //Science and innovation. – 2023. – T. 2. – №. D12. – C. 558-563.
6. Borisova Y. et al. Concomitant mental disorders and social functioning of adults with high-functioning autism/asperger syndrome //Science and innovation. – 2023. – T. 2. – №. D11. – C. 36-41.
7. Ivanovich U. A. et al. Efficacy and tolerance of pharmacotherapy with antidepressants in non-psychotic depressions in combination with chronic brain ischemia //Science and Innovation. – 2023. – T. 2. – №. 12. – C. 409-414.
8. Nikolaevich R. A. et al. Comparative effectiveness of treatment of somatoform diseases in psychotherapeutic practice //Science and Innovation. – 2023. – T. 2. – №. 12. – C. 898-903.
9. Novikov A. et al. Alcohol dependence and manifestation of autoaggressive behavior in patients of different types //Science and innovation. – 2023. – T. 2. – №. D11. – C. 413-419.
10. Pachulia Y. et al. Assessment of the effect of psychopathic disorders on the dynamics of withdrawal syndrome in synthetic cannabinoid addiction //Science and innovation. – 2023. – T. 2. – №. D12. – C. 240-244.
11. Pachulia Y. et al. Neurobiological indicators of clinical status and prognosis of therapeutic response in patients with paroxysmal schizophrenia //Science and innovation. – 2023. – T. 2. – №. D12. – C. 385-391.
12. Pogosov A. et al. Multidisciplinary approach to the rehabilitation of patients with somatized personality development //Science and innovation. – 2023. – T. 2. – №. D12. – C. 245-251.
13. Pogosov A. et al. Rational choice of pharmacotherapy for senile dementia //Science and innovation. – 2023. – T. 2. – №. D12. – C. 230-235.
14. Pogosov S. et al. Gnostic disorders and their compensation in neuropsychological syndrome of vascular cognitive disorders in old age //Science and innovation. – 2023. – T. 2. – №. D12. – C. 258-264.
15. Pogosov S. et al. Prevention of adolescent drug abuse and prevention of yatrogenia during prophylaxis //Science and innovation. – 2023. – T. 2. – №. D12. – C. 392-397.
16. Pogosov S. et al. Psychogenetic properties of drug patients as risk factors for the formation of addiction //Science and innovation. – 2023. – T. 2. – №. D12. – C. 186-191.
17. Prostyakova N. et al. Changes in the postpsychotic period after acute polymorphic disorder //Science and innovation. – 2023. – T. 2. – №. D12. – C. 356-360.
18. Prostyakova N. et al. Issues of professional ethics in the treatment and management of patients with late dementia //Science and innovation. – 2023. – T. 2. – №. D12. – C. 158-165.
19. Prostyakova N. et al. Sadness and loss reactions as a risk of forming a relationship together //Science and innovation. – 2023. – T. 2. – №. D12. – C. 252-257.
20. Prostyakova N. et al. Strategy for early diagnosis with cardiovascular diseaseisomatized mental disorders //Science and innovation. – 2023. – T. 2. – №. D12. – C. 166-172.
21. Rotanov A. et al. Comparative effectiveness of treatment of somatoform diseases in psychotherapeutic practice //Science and innovation. – 2023. – T. 2. – №. D12. – C. 267-272.

22. Rotanov A. et al. Diagnosis of depressive and suicidal spectrum disorders in students of a secondary special education institution //Science and innovation. – 2023. – T. 2. – №. D11. – C. 309-315.
23. Rotanov A. et al. Elderly epilepsy: neurophysiological aspects of non-psychotic mental disorders //Science and innovation. – 2023. – T. 2. – №. D12. – C. 192-197.
24. Rotanov A. et al. Social, socio-cultural and behavioral risk factors for the spread of hiv infection //Science and innovation. – 2023. – T. 2. – №. D11. – C. 49-55.
25. Rotanov A. et al. Suicide and epidemiology and risk factors in oncological diseases //Science and innovation. – 2023. – T. 2. – №. D12. – C. 398-403.
26. Sedenkov V. et al. Clinical and socio-demographic characteristics of elderly patients with suicide attempts //Science and innovation. – 2023. – T. 2. – №. D12. – C. 273-277.
27. Sedenkov V. et al. Modern methods of diagnosing depressive disorders in neurotic and affective disorders //Science and innovation. – 2023. – T. 2. – №. D12. – C. 361-366.