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POLLINOSIS AND PREGNANCY. WHAT CLINICAL FEATURES SHOULD BE CONSIDERED?

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Problems of diagnostics and treatment of allergic diseases (AD) in pregnancy occur rather often because of their high prevalence. According to foreign literature data, prevalence of AD in pregnancy ranges from 5 to 20% at present [1,3]. AD may develop both before and during pregnancy, influencing their clinical course and defining specific approaches to diagnostics and treatment [10-12]. During pregnancy a number of physiological changes in functioning of neuro-immune-endocrine system occur having an impact on AD clinical course [5, 7]. Besides, AD themselves affect the course of pregnancy because of dysfunction of immune system [1, 5, 6]. But AD is not a contraindication to pregnancy and childbearing taking into account great availability of effective antiallergic drugs. Pollinosis is the most common AD including gestation period. So, we present the major clinical features of its course, approaches to diagnostics, treatment and prevention of pollinosis in pregnancy based on the review of literature data as well as our own observations.

Pollinosis (from Latin – pollen) is an allergic disease involving mucous membranes (predominantly of nose and eyes) caused by hypersensitivity to aerosol allergens of plant pollen and fungus spores, their contents in the air periodically becoming cause-significant. The disease is also known under the following names: «pollen allergy», «pollen rhinopathy», «pollen bronchial asthma». But at present not only plant pollen but also fungus spores are considered to be allergens in pollinosis. Pollinosis is the most common AD occurring in 5-30% of people world-wide. This disease may develop at any age but mostly in young men and women including pregnant women. Strict seasonal pattern and development of acute symptoms of allergic reaction are characteristic to pollinosis, their severity depends on pollen or fungus spores concentration, duration of contact with the allergen, level of individual sensitivity to them. But off-season exacerbations of pollinosis may occur as well caused by food products and phytopreparations having cross allergic properties with pollen of certain plants.

Seasonal allergic rhinitis (SAR) and/or seasonal allergic conjunctivitis (SAC), bronchial asthma (BA) are the most common manifestations of pollinosis. The basic clinical symptoms of SAR are sneezing, rhinorrhea, nasal congestion, pruritus in the nose, decreased sense of smell. Pruritus, hyperemia, swollen conjunctiva, lacrimation, sometimes photophobia are common manifestations of SAC. Asthmatic fits, stridor, productive cough, expiratory dyspnea are characteristic to BA. Allergodermatosis (urticarial and Quincke's edema, atopic dermatitis), involvement of urogenital tract (vulvitis, cystitis, nephritis), gastro-intestinal tract (nausea, vomiting, diarrhea, stomach ache), pollen allergic myocarditis, Meniere's syndrome, pollen intoxication and others occur not so often.

Diagnostics of pollinosis is not difficult. It is based on the assessment of characteristic (seasonal) allergological anamnesis taking into

account plant blossoming calendar or fungus spores spread calendar in definite region, clinical symptoms, the results of skin prick-test and/or laboratory testing (methods for registration of anaphylactic reactions) with pollen and fungus allergens. Besides, cross allergic reaction with food products, beverages, herbal preparations often develop because of antigenic similarity with corresponding allergens.

Physicians and patients should remember that spontaneous healing in pollinosis is hardly probable. If the patient doesn't take annual preseason treatment, the course of the disease will be more severe every next season and allergen range will increase. Modern approaches to treatment of patients with pollinosis include: 1) elimination of «guilty» allergens; 2) specific immunotherapy by them; 3) drug therapy; 4) education of patients.

Specific characteristics of pollinosis course in pregnancy.

Three types of pregnancy influence on clinical course of AD including pollinosis can be distinguished on the basis of literature data:

- no influence of pregnancy on AD course;
- remission of AD associated with pregnancy;
- exacerbation of AD associated with pregnancy and followed by more severe course, specifically bronchial asthma and allergodermatosis.

Seasonal allergic rhinitis and conjunctivitis in pregnancy

There are no considerable differences in clinical manifestations of SAR and SAC in pregnant women when compared to non-pregnant patients. SAC in pregnancy is usually associated with other seasonal respiratory AD. In SAR impaired nose respiratory function leads to abnormal respiratory metabolism, hypoxia, dry mucous membranes, throat irritation, disturbed sleep and quality of life. Development of SAR in pregnancy and its exacerbations is caused by the action of those cause-significant pollen and fungus allergens detected or had to be detected before pregnancy. In exacerbation periods of SAR and SAC in pregnancy all characteristic signs of seasonal acute attacks develop, considerably decreasing quality of life. Sneezing, rhinorrhea, swollen nasal mucosa, pruritus in the nose are bared worse by pregnant than non-pregnant patients. That is why control of SAR and SAC course in pregnancy is of great significance. In 30-70% of cases differential diagnostics between SAR and nasal congestion associated with progesterone action can be required.

Pollen bronchial asthma in pregnancy

About 2% of pregnant women suffer from BA, and 15% of them have pollinosis [2, 3]. The incidence and clinical features of pollen bronchial asthma in pregnancy are studied insufficiently. BA is rarely first diagnosed during pregnancy, it commonly develops before fertilization. During pregnancy the severity of BA changes requiring thorough observation of the patient and the choice of treatment. About one third of pregnant women have severe course of BA, while in one third of them BA becomes less severe and in one third the course of BA is not changed [9]. But this is rather relative division as the state depends on the degree of BA severity and the level of its control. As a rule, the state of patients with severe BA, being rather rare in pollinosis, worsens. Usually disease exacerbation occurs on the 24-36th weeks of pregnancy (in pollinosis in the pollen season of cause-significant allergens), while in the last 4 weeks of pregnancy in all women with BA the improvement of state is observed. According to investigations [3, 5, 12], 42% of pregnant patients with moderate and severe BA require enhancement of basic BA therapy, while 18% require the decrease of therapy intensity and 40% require no correction of therapy.

Although there are certain concerns as to the use of drugs during pregnancy, it is proved that insufficient control of BA in pregnant patients is associated with a number of negative effects on the fetus, ultimately leading to increased perinatal mortality, increased risk of premature labor as well as low birth weight of the newborn. Basically perinatal prognosis for children born from BA mothers and receiving adequate therapy during pregnancy, is comparable to infants born from healthy mothers.

Exacerbation of BA in pregnancy and the development of more severe clinical course of the disease were established [3, 10-12] to be associated with the absence of adequate therapeutic regimen both before and during pregnancy. For instance, severe and inadequately con-

trolled BA during pregnancy is clearly associated with increased number of preterm labor, delivery of infants with hypotrophy, hypoxia neonatorum, their death as well as with the development of complications in mothers in the forms of extremely severe and even fatal BA. It is rather difficult to predict worsening of BA course in pregnancy because clinical course of BA in this period is determined by physiologic features of bronchopulmonary system of future mother as well. That is why adequate treatment of BA during pregnancy is of great significance to avoid the symptoms of breathing difficulty and disease exacerbation. It should be mentioned that not only pregnancy affects BA course but BA affects pregnancy as well. Pregnant women with BA often have more severe early and late toxicosis, sometimes with uncontrollable vomiting, headaches, dizziness, loss of appetite, as well as the development of vaginal bleeding [3, 5].

Diagnostics of pollinosis in pregnancy

Diagnostics of pollinosis, like other AD, in pregnancy has its specific character as not all conventional methods of allergological investigation can be used in corpore. In pregnancy the diagnosis is based on the results of thorough allergological anamnesis (seasonal exacerbations of pollinosis), patient's medical and life history, physical examination data. But such informative in allergology tests as skin and provocative tests with cause-significant allergens are contraindicated because of possible systemic manifestations of allergic reactions. In pregnancy the use of provocative methods of allergologic investigation with histamine, methacholine, acetylcholine and other mediators are forbidden as well. Intracutaneous tests with allergens are not performed because of probable systemic allergic reactions.

The results of nasal secretion and lacrimal fluid microscopy detecting eosinophilia of these biological fluids, may be used as additional diagnostic methods. Eosinophilia of peripheral blood is characteristic to pollinosis as well. In cases when pollinosis symptoms first appear during pregnancy and anamnesis data can't provide information about allergic character of reaction, laboratory methods of specific allergological diagnostics (radioallergensorbent test/RAST test, enzyme immunoassay, chemiluminescence method, basophil tests and others) are used to determine the spectrum of significant causative pollen and fungus allergens. The choice of the methods is based on IgE-dependent type of allergic reaction in pollinosis.

Treatment of pollinosis in pregnancy

A number of women-patients and unfortunately some physicians mistakenly refuse from treatment of pollinosis and other AD during pregnancy and sometimes discontinue taking drugs because of their possible side effects. Such approach often leads to exacerbations and complications of both AD and pregnancy and labor course. Principles of pollinosis treatment in pregnancy have certain specific features. Educational programs and elimination therapy in patients with pollinosis preparing for pregnancy or those who are already pregnant are of great significance. Allergological investigation should be completed before pregnancy (in pollinosis the best time is the period immediately after completion of pollen season of cause-significant plants) followed by recommendations of allergologist as to hypoallergic measures. Elimination or maximal decrease of exposure to triggers primarily pollen and fungus allergens lead to the improvement of disease course and decreased risk of its exacerbations being rather important in pregnancy. Women-patients with BA are advised to take a course of study at Asthma-school, teaching them the principles of elimination therapy, methods of inhalation therapy, use of spacer and nebulizer, peackflowmetry technique etc. In case of associated diseases requiring scheduled therapy consultation of a specialist doctor is mandatory to correct their therapy taking into account planned or already existing pregnancy.

The principal strategy in pollinosis treatment in pregnancy is the use of drugs providing effective control of disease symptoms but not affecting the course of pregnancy and fetus development, that is preparations with proved safety level. It should be remembered that the first trimester is the most vulnerable period of pregnancy with respect to any medication. In this case the best way is a consultation of doctor-allergologist, obstetrician-gynecologist and other specialists if necessary to determine the therapeutic approach to management of the patient during pregnancy. In pregnant women with pollinosis and other AD

the first problem to discuss is the use of such preparations as glucocorticosteroids (GCS), antihistamine preparations (AHP), bronchodilators, mucolytic agents, decongestants, cromones and xanthines. Table 1 presents their possible use in pregnancy on the basis of registration documents to abovementioned drugs in Ukraine and Russia [4, 7, 8].

Table 1

Possibilities of Drug Use in Pregnancy [4, 7, 8]

Drugs for treatment of AD	Influence on embryo, fetus, pregnancy, delivery	Use in pregnancy
Antihistamines		
Azelastine	-	Contraindicated (especially in the 1st trimester)
Acrivastine	-	Contraindicated
Astemizole	-	By strict indications
Hydroxysine	-	Contraindicated
Desloratadine	Penetrates trough placenta	Contraindicated
Dimethindene	-	Contraindicated in the 1st trimester, according to strict indications in the 2nd and the 3rd trimesters
Diphenhydramine	-	With caution, especially in the 3rd trimester
Ketotifen	-	Contraindicated
Clemastine	-	By strict indications
Levocetirizine	-	Contraindicated
Loratadine	-	With caution
Mebhydrolin	-	With caution
Promethazine	Penetrates through placenta	With caution
Fexofenadine	Teratogenecity in animals in high doses	With caution (assessment of criterion of benefit / risk)
Quifenadine	-	Contraindicated in the 1st trimester
Chloropyramine	-	Contraindicated
Cetirizine	-	With caution
Cyproheptadine	Can penetrate through placenta	Contraindicated
Ebastine	-	Contraindicated
Topical GKS		
Beclomethasone	Not enough data	With caution (assessment of criterion of benefit / risk)
Betamethasone	-	Only in exceptional cases
Budesonide	-	Contraindicated in the 1st trimester, with caution in the 2nd and the 3rd trimesters
Hydrocortisone	Disorders in development of fetus in animals	Dangerous (assessment of criterion of benefit/risk)
Clobetasol	-	Contraindicated
Methylprednisolone aceponate	-	With caution (assessment of criterion of benefit / risk)
Mometasone	-	Possible, assessment of criterion of risk/benefit
Triamcinolone	Teratogenecity in animals	Contraindicated in the first 5 months
Fluocinolone acetonide	-	Contraindicated
Fluticasone	-	With caution (assessment of criterion of benefit / risk)
Systemic GKS		
Hydrocortisone	Disorders in development of fetus in animals	Contraindicated
Betamethasone	-	Only in exceptional cases
Dexamethasone	Possible disorders in growth of fetus, and atrophy of adrenal glands in the 3rd trimester	Dangerous, assessment of criterion of risk/benefit especially in the 1st trimester
Methylprednisolone	-	Contraindicated
Prednisolone/Prednisone	-	By life-saving indications, especially in the 1st

		trimester
Triamcinolone	Teratogenecity in animals	Contraindicated during the first 5 months
Cromones		
Cromoglicic acid	Toxic effect on female animals	Contraindicated in the 1st trimester, with caution in the 2nd and the 3rd trimesters
Nedocromil	-	With caution, especially in the 1st trimester
Bronchial Spasmolytics		
Adrenergic		
Clenbuterol	Tocolytic effect	Contraindicated in the 1st trimester and before the delivery
Orciprenaline	-	With caution
Salmeterol	-	With caution (assessment of criterion of benefit/risk)
Salbutamol	Penetrates through placenta, teratogenicity in animals	With special caution
Troventhol	-	Contraindicated
Fenoterol	Does not penetrate through placenta	With caution in the 1st trimester
Formoterol	Adequate research was not conducted	Restricted (assessment of criterion of benefit/risk)
Anticholinergic		
Ipratropium bromide	-	Contraindicated in the 1st trimester
Tiotropium bromide	-	Contraindicated in the 1st trimester
Xanthines		
Aminophylline	Penetrates through placenta	Contraindicated
Theophyllin	Penetrates through placenta	With caution
Mucolytics		
Ambroxol	Penetrates through placenta	Contraindicated in the 1st trimester
Acetylcysteine	Penetrates through placenta	By strict indications
Bromhexine	Penetrates through placenta	Contraindicated in the 1st trimester
Guaifenesin	Safety is not determined	By strict indications
Carbocisteine	-	Contraindicated in the 1st trimester, with caution in the 2nd and the 3rd trimesters
Antileukotriene		
Zapfirlukast	Safety is not determined	Contraindicated
Montelukast	-	By strict indications
Topical decongestants		
Antazoline/Tetryzoline	-	By strict indications
Xylometazoline	-	Contraindicated
Oxymetazoline	-	With caution (assessment of criterion of benefit/risk)
Tetryzoline	Safety is not determined	With caution (assessment of criterion of benefit/risk)
Systemic decongestants		
Pseudoephedrine	-	Contraindicated
Phenylephrine	Safety is not determined	With caution (assessment of criterion of benefit/risk)

FDA experts (USA) divided all drug products into five groups of teratogenicity according to their potential harm for the embryo and fetus. These groups are marked in prescribing information by letters A, B, C, D or X:

- "A" – special investigations found no harmful effect on the fetus;

- "B" – experiments on animals found no harmful effect on the fetus, there is no information as to harm for man (no special investigations were performed);

- "C" - experiments on animals found detrimental effect on the fetus, but it was not proved for man. Drugs of this group are admi-

nistered to a pregnant woman only in cases when useful effect of the drug overweight's the risk of its possible harm;

- "D" – there are evidences of harmful effect of the drug on the fetus but its administration is justified despite the risk (in life-threatening states, in severe diseases when more dangerous drugs are ineffective);

- "X" – absolutely detrimental drug for the fetus, its harmful effect overweights any possible benefits for the woman's organism. Drugs of this group are strictly contraindicated to pregnant women and those who are going to carry a child.

Unfortunately, none of the drugs used for treatment of pollinosis belongs to group "A". The following medicines belong to group "B": ipratropium bromide, salmeterol, salbutamol, terbutaline, sodium cromolyn, nedocromil, zileuton, zafirlukast, budesonide, chlorpheniramine, clemastine, loratidine, cetirizine. Prednisone, prednisolone, dexamethasone, beclomethasone, flunisolide, fluticasone, triamcinolone, theophylline, albuterol, adrenergic and anticholinergic agents belong to group "C".

Treatment of SAR and SAC in pregnancy

It is known that Weber's douche with saline solutions, AHP, endonasal GCS, cromones and decongestants are used in treatment of patients with SAR. Only drug products with established safety profile should be used in management of pregnant patients [3, 7]. Systemic AHP are used in pregnancy by doctor's administration in case of emergency when expected benefit overweights possible risk for the fetus, as there is no enough experience of its use in pregnancy. The use of astemizole and terfenadine (arrythmogenic action, proved embryotoxic action in animals) is absolutely unacceptable. Administration of 1-st generation sedative AHP is undesirable or even contraindicated because of numerous side effects (Table).

Safety and good tolerability of cromoglicic acid preparations as qualitative basic preventive therapy of SAR and SAC in pregnant women is shown. In this situation preparation Cromohexal in the form of nasal spray and eye drops is recommended to pregnant women because of its high level of safety and rather high effectiveness in mild manifestations. In more severe forms of SAR endonasal GCS, predominantly beclomethasone and budesonide with most studied effects in pregnancy are used or less studied mometasone and fluticasone. GCS in the form of eye drops may be used in severe SAC. Drug dosage regimen in pregnant patients is similar to other patients with pollinosis.

In case of evident nose congestion in pregnant women with SAR decongestants are sometimes required. Short-time use of topical agents oxymetazoline and tetruzoline is possible. But systemic decongestants containing pseudoephedrine are contraindicated.

Treatment of pollen BA in pregnancy

Treatment of pollen BA in pregnancy consists of basic therapy (drugs for disease control) to control inflammation and drugs for relief of symptoms and treatment of acute conditions of this form of pollinosis. Inhaled GCS are the most effective drugs in basic therapy of persistent asthma in pregnancy except mild cases. Their relative safety in treatment of BA in pregnancy was recently shown in some studies. The best studied agents are beclomethasone and budesonide, so they are advised to be used first. Administration of GCS in pregnancy has its specific aspects. If they are prescribed for the first time, then budesonide is the drug of choice. Review of 2014 pregnancies made in 2000 showed no increased risk for the fetus in those using budesonide. Beclomethasone available in Ukraine may be administered as well. If BA was well controlled with other inhaled GCS before pregnancy there is no need to change them. It is recommended to use an inhaler free from freon and a spacer to decrease the risk of side effects. Drug dosage regimen of inhaled GCS in pregnant patients is similar to other patients.

Parenteral and oral administration of GCS (prednisolone, dexamethasone) in pollen BA in pregnancy is warranted only for specific indications. But it is strongly recommended to avoid deposited forms of systemic long-acting GCS (kenalog, diprospan).

Safety and good tolerability of cromoglicic acid preparations as basic preventive therapy in intermittent and mild persistent BA, SAR and SAC was demonstrated in a number of studies, though their use in more severe forms of BA is not warranted. Drug dosage regimen of these drugs in pregnant patients is similar to other patients with BA. If the drug is

administered for the first time during pregnancy sodium cromoglicate is used. If the patient took nedocromil with good effect before pregnancy, the therapy may be continued. But if cromones provide no adequate control of the disease inhaled GCS should be administered.

Short-acting B_2-agonists, their inhaled forms in particular, are the major preparations in treatment of acute attacks of pollen BA. The majority of them (except clenduterol and troventol) are rather safe in pregnancy. But the drugs having selective effect on the bronchi and minimum effect on cardio-vascular system should be chosen. In acute attacks of seasonal BA in pregnancy nebulizer forms of B_2 – agonists is the best choice. The best studied and the most effective of them are salbutamol and terbutaline, fenoterol – to lesser extent. Fenoterol and its combination with anticholinergic drug may be used in the1-st trimester if expected benefits for mother overweight possible risks for the fetus. Inhaled anticholinergic drugs (ipratropium bromide) showed no adverse effect on fetus development but this preparation is not used separately in treatment of BA (only in combinations with B_2-agonists) because of its slow action.

Injections of B_2-agonists should be used with great caution in pregnancy because of their ability to relax uterine muscles. This can cause increased bleeding in threatened miscarriage in the 1-st and 2-nd trimester, premature detachment of placenta, bleeding and toxicosis in the 3-d trimester. Inhaled forms of B_2 – agonists have slight effect on uterine muscles when used in recommended doses. Uncontrollable use of bronchial spasmolytics in late terms of pregnancy can lead to prolonged delivery.

There is no sufficient data as to safety of long-acting B_2-agonists (salmeterol, formeterol) and anticholinergic drugs (tiotropium bromide) in treatment of BA in pregnancy, so short-acting preparations should be chosen. Xanthines (theophylline) exerting no teratogenic effect on the fetus are recommended in acute attacks of BA in pregnancy only in exceptional cases, particularly in the 3-rd trimester when clearance time of theophylline is decreased, it freely crosses the placenta causing tachycardia and arrhythmia in the fetus and newborn. In pregnancy ephedrine preparations are completely contraindicated as they aggravate fetal hypoxia. Adrenalin is not recommended in acute attacks of BA.

Leukotriene antagonists in SAR and BA in pregnancy may be used with caution and only by strict indications. AHP are not used in treatment of isolated BA in pregnancy, but occasionally need for them is associated with other manifestations of pollinosis. As to mycolytics, iodine preparations and iodinated agents (e.g. potassium iodide) are contraindicated because of their action on the thyroid function of the fetus. In the 1-st trimester ambroxol, acetylcysteine, carbocisteine, bromhexine are contraindicated.

On the whole there is no reason to expect an increased risk of side effects on the fetus using drugs for treatment of BA except alpha-adrenergic medicines, brompheniramine and epinephrine. Providing adequate observation of the pregnant woman with pollen BA, treatment with inhaled GCS (beclomethasone dipropionate, budesonide) and inhaled B_2 –agonists (salbutamol, troventol), cromones and even theophylline is not followed by increased incidence of congenital malformations in fetal development [3, 10-12]. Inhaled GCS were proved to prevent exacerbations of pollen BA, particularly in pregnancy. Quickly developing exacerbations of pollen BA should be treated promptly to avoid fetal hypoxia. This should include quick-acting B_2 –agonists through nebulizer with oxygen. Systemic GCS should be administered if needed (prednisolone is the best choice).

Recommendations for treatment of BA in pregnancy were formulated in international agreement GINA in 2006 [9]. It states that the use of such drugs as theophylline, inhaled GKS (budesonide is best studied), B_2 –agonists and leukotriene modifiers (only montelukast) is not associated with increased incidence of fetal malformations. Several studies demonstrated inhaled GCS to prevent exacerbations of BA in pregnancy. In pregnancy, as in any other case, maintenance of adequate control over BA symptoms and normal lung function is of great significance. Acute attacks of BA in pregnancy require prompt therapy to prevent fetal hypoxia. It implies the use of quick-acting B_2 – agonists in nebulizers and oxygen, and inhaled GCS if needed. All patients with BA are advised to discuss with their physician the prob-

lems concerning safety of administered drugs. It is recommended to provide educational work among pregnant women with BA telling them about detrimental effect of insufficient control of the disease for their future children and safe modern preparations for treatment of BA.

ASIT (Allergen-specific immunotherapy) in pregnancy

At present ASIT is the only effective pathogenetic method of pollinosis treatment. Its use in pregnancy has been a question of debate for many years. Pregnancy for a long time was a contraindication for ASIT in Ukraine, Russia and some former republics of the USSR. Recently, in the USA and several European countries (Italy, Spain) safety and advisability of the use of ASIT during pregnancy were proved. According to literature data children born from mothers who had undergone ASIT during pregnancy showed no signs of increased predisposition to atopy [3]. Now there exist the following recommendations concerning ASIT in pregnancy:

- if pregnancy developed at the time of ASIT this therapy should be completed;

- administration of ASIT during pregnancy is not advisable;

- individualized approach should be used in carrying out ASIT during pregnancy, increase of every next dose of allergen should be slower than in non-pregnant patients.

Thus, pregnancy often affects clinical course of pollinosis, approaches to its diagnostics and treatment, requiring special control of this disease in pregnant women. In treatment of such patients it is necessary to consider possible side effects of anti-allergic drugs. Administration of modern effective medicines allows to control the course of pollinosis and to avoid the development of side effects of these drugs. So, pollinosis like other allergic diseases should not become the cause of refusal from pregnancy. But the problems of family planning are of great importance for women suffering from pollinosis. In this case the beginning of pregnancy should be planned on remission period, and preseason prevention of acute attacks of the disease with pharmacotherapy should be carried out before the beginning of pollen season of cause-significant allergens.

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ПОЛІНОЗ І ВАГІТНІСТЬ. ЯКІ ОСОБЛИВОСТІ НЕОБХІДНО ВРАХОВУВАТИ?

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А н о т а ц і я

Актуальність: У зв'язку зі значним зростанням поширеності алергічних захворювань(АЗ) лікарям все частіше доводиться вирішувати питання їх діагностики та лікування у вагітних. Одним з найпоширеніших АЗ, у тому числі і в період вагітності, є поліноз (Пз). Вагітність часто впливає на клінічний перебіг, підходи до діагностики і лікування Пз, що вимагає особливого контролю цього захворювання у вагітних.

Мета дослідження: У представленому огляді розглянуті особливості клінічного перебігу, діагностики, питання безпечного лікування і профілактики Пз у вагітних.

Матеріали та методи на основі аналізу даних літератури і власних спостережень викладено основні особливості клінічного перебігу, підходів до діагностики, лікування і профілактики Пз у вагітних.

Результати досліджень та їх обговорення: При вагітності діагноз базується на результатах ретельно зібраного алергологічного анамнезу (сезонність загострення Пз), історії хвороби і життя пацієнтки, даних фізикального обстеження. Основною стратегією в лікуванні Пз при вагітності є використання лікарських засобів, здатних ефективно контролювати симптоми захворювання, але тих що не впливають на течію вагітності і розвиток плоду, тобто з доведеним рівнем безпеки. Як і для терапії інших АЗ, при лікуванні вагітних з САР повинні застосовуватися тільки лікарські засоби зі встановленим профілем безпеки. Системні антигістамінні препарати застосовуються при вагітності за призначенням лікаря тільки у випадках крайньої необхідності, коли очікувана користь перевищує можливий ризик для плоду, оскільки досвіду їх застосування при вагітності доки недостатньо. Показана безпека і хороша переносимість вагітними препаратів кромогліцієвої кислоти в якості базисної профілактичної терапії при САР і САК. Як і для звичайних пацієнток з пилковою БА, лікування цього захворювання при вагітності складається з базисної терапії, спрямованої на контроль над запаленням, і препаратів для полегшення симптомів і лікування загострень цієї форми Пз. Найбільш ефективними препаратами базисної терапії БА у вагітних традиційно залишаються інгаляційні глюкокортикостероїди. Рекомендації щодо лікування БА у вагітних сформульовані в міжнародній угоді GINA

Висновки: при лікуванні вагітних з Пз необхідно враховувати можливі побічні ефекти протиалергічних препаратів. Призначення сучасних і ефективних лікарських засобів дозволяє у більшості випадків контролювати перебіг Пз і уникати розвитку побічних ефектів медикаментозних препаратів.

Ключові слова: алергічні захворювання, поліноз, вагітність, діагностика, лікування, побічні ефекти, профілактика.

POLLINOSIS AND PREGNANCY. WHAT CLINICAL FEATURES SHOULD BE CONSIDERED?

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A b s t r a c t

Actuality: Problems of diagnostics and treatment of allergic diseases (AD) in pregnancy occur rather often because of their high prevalence. Pollinosis is the most common AD including gestation period. Seasonal allergic rhinitis (SAR) and/or seasonal allergic conjunctivitis (SAC), bronchial asthma (BA) are the most common manifestations of pollinosis. Pregnancy often affects clinical course of pollinosis, approaches to its diagnostics and treatment requiring special control of this disease in pregnant women.

Objective: The analysis of clinical course of the disease, its diagnostics as well as the problems of safe treatment and prevention of pollinosis in pregnancy is presented in this review.

Materials and methods we present the major clinical features of its course, approaches to diagnostics, treatment and prevention of pollinosis in pregnancy based on the review of literature data as well as our own observations.

Results and discussion. In pregnancy the diagnosis is based on the results of thorough allergological anamnesis (seasonal exacerbations of pollinosis), patient's medical and life history, physical examination data. Principles of pollinosis treatment in pregnancy have certain specific features. Educational programs and elimination therapy in patients with pollinosis preparing for pregnancy or those who are already pregnant are of great significance. The principal strategy in pollinosis treatment in pregnancy is the use of drugs providing effective control of disease symptoms but not affecting the course of pregnancy and fetus development, that is preparations with proved safety level. Only drug products with established safety profile should be used in management of pregnant patients. Systemic antihistamine preparations are used in pregnancy by doctor's administration in case of emergency when expected benefit overweights possible risk for the fetus, as there is no enough experience of its use in pregnancy. Safety and good tolerability of cromoglicic acid preparations as qualitative basic preventive therapy of SAR and SAC in pregnant women is shown. Treatment of pollen BA in pregnancy consists of basic therapy (drugs for disease control) to control inflammation and drugs for relief of symptoms and treatment of acute conditions of this form of pollinosis. Inhaled GCS are the most effective drugs in basic therapy of persistent asthma in pregnancy except mild cases. Recommendations for treatment of BA in pregnancy were formulated in international agreement GINA.

Conclusions: In management of pregnant patients with pollinosis potential side effects of anti-allergic drugs should be considered. Administration of modern effective medicines allows to control the course of pollinosis and to avoid the development of side effects of these drugs.

Keywords: allergic diseases, pollinosis, pregnancy, diagnostics, treatment, side effects, prevention.