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# THE COURSE OF PREGNANCY, CHILDBIRTH AND POSTPARTUM PERIOD

IN ACUTE INFECTIONS OF THE RESPIRATORY SYSTEM

In diseases of acute infections of the respiratory system in the second and/ or third trimester of pregnancy, usually disturbed physiological course of pregnancy, manifested by functional disorders on the part of the mother and fetus, in some cases leads to non-developing pregnancy, infection of the fetus with subsequent postnatal manifestations. [4]



### **ABSTRACT**

In the structure of acute infections of the respiratory system during pregnancy in the first place was marked - acute respiratory viral infection (40.0%), the second acute tracheobronchitis (30.0%), the third - acute pharyngitis (20.0%). In the prevailing majority of pregnant women (76.7%), respiratory infections were noted in the third trimester of pregnancy, which confirms the role of the natural decrease in the immune resistance of pregnant women (predominantly in the third trimester) in the development of infectious diseases of the respiratory tract. Moreover, every fifth (20.0%) had a relapse of infection after hospital treatment. The most frequent complications of pregnancy after acute respiratory infection are hypertension in pregnant women - 46.7%, threatened abortion at different periods of gestation – 33.3%. Among complications during delivery note prenatal rupture of membranes, each fifth (20,0%) patients, birth injuries (rupture of the vagina and perineum) one out of every parturient women (26.7%) and every tenth (10.0 percent) premature births in the period 35-36 weeks of pregnancy. Timely diagnosis and complex antibacterial, antiviral, symptomatic therapy of acute infections of the respiratory system during pregnancy contribute to the favorable course of the postpartum period.

**Keywords:** acute respiratory infections, pregnancy, pregnancy complications, labour, postpartum period.

# RELEVANCE

Respiratory lesions in Kazakhstan are in the first place in the structure of the overall morbidity and account for 22.900 cases per 100 thousand population. This figure is quantitatively ahead of the incidence of cardiovascular system (IV national Congress of respiratory diseases). Among the diseases of the respiratory tract during pregnancy, according to various authors, the most frequently noted are SARS, influenza, pharyngitis, tracheitis, bronchitis. In the structure of all extragenital pathology, the frequency of acute respiratory viral infections in pregnant women is up to 80%. ARI during pregnancy observed in 2-9% of patients. The significance of the problem is determined by the adverse effect of respiratory viral infection on the course of pregnancy. childbirth, the postpartum period, as well as perinatal morbidity. [1,2]

Viruses that cause a large part of acute respiratory diseases, especially dangerous in the 1st trimester, as have embriotoksicescoe, teratogenic, fetopathies effect, further can cause abortion.. Note the formation of malformations (with infection in the first trimester of pregnancy up to 10%), the threat of abortion in 25-50%, intrauterine infection of the fetus in 30% of cases [2]. As you know, in the mother's body with a normal pregnancy always creates a state of temporary immunodeficiency. Formed during pregnancy immune status (IgG deficiency, inhibi-

tion of phagocytosis of neutrophils and macrophages, hyperfunction of T-suppressors) leads primarily to increased susceptibility to viral (influenza, hepatitis, polio, rubella, chickenpox) and bacterial (especially streptococcal) infection. Therefore, the severity of complications is higher in the disease in the II and III trimesters of pregnancy, when women are less resistant to infections. [3]

According to Mayorov M.V. (2011), primary bronchitis, in combination with laryngitis, tracheitis, acute respiratory disease, is more common in pregnant women. Moreover, the prevailing majority (80%) showed threatening termination of pregnancy, in every third pregnant woman (32.7%) gestosis and chronic intrauterine fetal hypoxia (28.8%). Premature birth in 18.4% of women [5]. Complications of gestation also include placental insufficiency with the formation of intrauterine growth retardation and chronic fetal hypoxia. [2,6]

After an infection of the respiratory system during pregnancy, during childbirth, such patients can not detect any complications. Deliveries in the acute period of viral disease, especially premature, have an adverse effect on the fetus and newborn, which is reflected in lower rates of physical development and increased morbidity. In women with acute infectious diseases there is an increase in the frequency of complications in the postpartum period. [3]

The relevance of this topic lies in the fact that despite the available numerous literature data, to date, there are no clear recommendations for the management of pregnant women with acute respiratory infections in different periods of gestation, taking into account the development of long-term complications in the mother and fetus.

### **PURPOSE OF RESEARCH**

To study the features of the course of pregnancy, childbirth, the postpartum period and the condition of newborns with acute respiratory infections in different periods of pregnancy.

#### **MATERIAL AND METHODS**

The work was carried out on the basis of maternity hospital №5 in Almaty. In a prospective study involved 30 women enrolled in the pathology Department of the city clinical maternity hospital №5 in Almaty with various diseases of the respiratory system in different periods of pregnancy during 2017-2018 years. Conducted history taking, General and obstetrical examination, analysis of individual maps of pregnant women were studied during labour, the postpartum period, as well as the history of the development of newborns.

Of the total number of surveyed pregnant women aged primiparas was 23.3%, who already had children – 76.7 per cent. The mean age of the examined patients was 26.2±3 one year.

All pregnant women were registered in the women's clinic, visited the district doctor on average 7 times. The prevailing majority of women (77.5%) consulted women before 14 weeks of pregnancy, the remaining 22.5% of pregnant women over 14 weeks.

In the history of somatic diseases in every third (33.3%) pregnant dominated diseases of the urinary system and in every fourth (26.7%) chronic respiratory diseases. Diseases of the endocrine system were 16.7%, cardiovascular system – 13.3%, digestive system – 10.0%.

As can be seen from table 1, among the diseases of the respiratory system, chronic bronchitis, chronic tonsillitis, community-acquired pneumonia, pulmonary tuberculosis were noted.

Gynecological history showed a high incidence [9] of inflammatory diseases of the female genital organs (vulvovaginitis, salpingooforit) in every second (50.0%), cervical pathology in every third (33.3%) examined. Further, the frequency of occurrence was noted: genital endometriosis, cervical canal polyp, polycystic ovaries.

In the structure of acute respiratory infections, acute respiratory viral infection and acute pharyngitis were the most common in the first trimester of pregnancy (10.0%). In the second trimester, acute pharyngitis, acute respi-

*Table 1* – Structure of somatic morbidity in pregnant women

Nº	Morbidity of pregnant women		%
1	Diseases of the urinary system (chronic pyelonephritis, pyeloectasia)		33,3
2	Diseases of the respiratory system (chronic bronchitis, chronic tonsillitis, community-acquired pneumonia, pulmonary tuberculosis)	8	26,7
3	Diseases of the endocrine system (hypothyroidism, obesity)		16,7
4	Cardiovascular disease (hypertension, neurocirculatory dystonia on hypertonic type)		13,3
5	Diseases of the digestive system (chronic gastritis, gastric ulcer)	3	10

Table 2 – Structure of acute respiratory infections

Nº	Acute infections suffered respiratory system	Trimester of pregnancy	n	%
1	Acute respiratory viral infection	- First	2	6,7
2	Acute pharyngitis	Filst	1	3,3
3	Acute pharyngitis	Second	5	16,7
4	Acute respiratory viral infection		3	10
5	Acute bronchitis		2	6,7
6	Acute tracheobronchitis	Third	9	30
7	Acute respiratory viral infection		7	23,3
8	Acute tracheitis		4	13,3
9	Acute bronchitis		3	10

ratory viral infection and acute bronchitis were noted in every third (33.3%) of the examined patients. However, the prevailing majority of pregnant women (76.7%) had respiratory infections in the third trimester of pregnancy, which confirms the role of the natural decrease in the immune resistance of pregnant women (predominant in the third trimester) in the development of infectious diseases of the respiratory tract. Moreover, every fifth (20.0%) had a relapse of infection after hospital treatment (table 2).

As can be seen from table 2, the most common pathology during pregnancy – acute respiratory viral infection (40.0%), in second place – acute tracheobronchitis (30.0%), in third place – acute pharyngitis (20.0%).

All pregnant women after a full clinical and laboratory examination, examination of the therapist, infectionist (according to indications), within 5 days of antibacterial (Ampicillin – 1,0•4 times a day/m or Cefazolin – 1,0•3 times a day/m), symptomatic (Ambro – 2,0•2 times a day/m), antiviral therapy (Tamiflu – 75 mg•2 times a day). In 9 cases, taking into account the long course of the infectious process, to exclude pneumonia, chest x-rays were performed, where acute bronchitis was confirmed.

After respiratory tract infection, the course of pregnancy in 46.7% of the examined patients was complicated by hypertension in pregnant women: pregnancy-induced edema and proteinuria, pregnancy-induced hypertension, mild preeclampsia. In 33.3% of pregnant women there was a threat of termination of pregnancy at different gestation periods: threatening spontaneous miscarriage, threatened preterm labor. In 13.3% after an additional study (ultrasound of the pelvic organs with the determination of the amniotic fluid index, dopplerometry) revealed hydramnios, oligoamnios and in 6.7% intrauterine growth restriction.

As can be seen from diagram 1, after the respiratory tract infection, the course of pregnancy was complicated: hypertension, the threat of termination of pregnancy, polyhydramnios, low water and fetal growth retardation.

The majority of women (60.0%) had spontaneous emergency labor in the occipital presentation, in 10.0% of cases preterm labor in the period of 35-36 weeks of pregnancy. Among the complications of childbirth, prena-

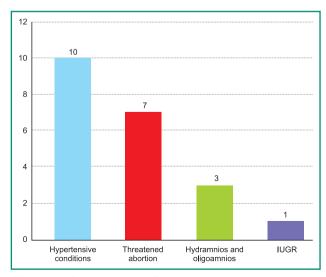


Figure 1 – Complications of pregnancy

tal rupture of fetal membranes should be noted in 20.0% of pregnant women who spontaneously began regular labor within 24 hours.

In 9 cases, which amounted to 30.0%, childbirth ended by cesarean section in a planned and urgent manner. According to the Protocol of the Ministry of health №10 from 04 July 2014 "Caesarean section" to reduce the risk of postoperative infections for preventive purposes, antibiotics should be prescribed 15-60 minutes before the skin incision. And choose antibiotics that are effective against endometritis, urinary tract infection and wound infection, which are found in about 8-20% of women who underwent cesarean section [7]. In all cases, before the operation for prophylactic purposes, Cefazolin was prescribed 1 grams intravenously. [8]

The average duration of the first period of labor was 9 hours 40 minutes, the second period of labor – 50 minutes. Thus at each fourth pregnant process of labor was complicated by ancestral injury (26,7%), mostly tears of vagina and perineum of 1-2 degrees. In 93.3% of cases, the condition of newborns was evaluated on the Apgar scale by 7-8 points, in 6.7% of cases by 6-7 points (extracted by cesarean section for the threatening condition of the fetus). The postpartum period was uneventful. All newborns were discharged home with their mothers in satisfactory condition under the supervision of an obstetrician-gynecologist.

#### **CONCLUSIONS**

- 1. In the prevailing majority of pregnant women (76.7%), respiratory infections were noted in the third trimester of pregnancy, which confirms the role of the natural decrease in the immune resistance of pregnant women (predominant in the third trimester) in the development of infectious diseases of the respiratory tract. Moreover, every fifth (20.0%) had a relapse of infection after hospital treatment.
- 2. In the structure of acute infections of the respiratory system during pregnancy in the first place marked acute respiratory viral infection (40.0%), the second acute tracheobronchitis (30.0%), the third acute pharyngitis (20.0%).
- 3. The most frequent complications of pregnancy after acute respiratory infection are hypertension in pregnant women -46.7%, the threat of termination of pregnancy at different periods of gestation -33.3%.
- 4. Among complications during delivery note prenatal rupture of membranes, each fifth (20,0%) patients, birth injuries (rupture of the vagina and perineum) one out of every four mothers (26.7%) and every tenth (10.0 percent) premature births in the period 35-36 weeks of pregnancy.
- 5. Timely diagnosis and complex antibacterial, antiviral, symptomatic therapy of acute infections of the respiratory system during pregnancy contribute to the favorable course of the postpartum period.

## ТҮЙІНДЕМЕ

БИЩЕКОВА Б.Н.¹, УМИРОВА Р.У.¹, АЙГЫРБАЕВА А.Н.¹, МУХАМЕДЖАНОВА Ж.А.¹, ХОН А.¹, КАЛИДИНОВА А.¹, ШИНТАСОВА Н.¹, <sup>1</sup>С.Ж. Асфендияров атындағы ұлттық медициналық университеті, Алматы қ.

# ТЫНЫС АЛУ ЖҮЙЕСІНІҢ ЖЕДЕЛ ИНФЕКЦИЯ КЕЗІНДЕ ЖҮКТІЛІК, БОСАНУ, БОСАНҒАННАН КЕЙІНГІ КЕЗЕҢІНІҢ АҒЫМЫ

Жүктілік кезінде тыныс алу жүйесінің жедел инфекцияның құрылымында жиі кездесетін ауруға – жедел респираторлық вирусты инфекция (40,0%), екінші орында – жедел трахеобронхит (30,0%), үшінші орында – жедел фарингит (20,0%) жатады.

Көптеген жүкті әйелдерде (76,7%) тыныс алу жүйесінің инфекциясы жүктіліктің үшінші триместрінде байқалды, ол жүкті әйелдердің табиғи иммунды резистенттіліктің төмендеуіне байланысты (ІІІ триместрде) респираторлы жолда инфекцияның дамуын көрсетеді. Әрбір бесінші әйелде (20,0%) стационарлық ем қабылдағаннан кейін инфекцияның қайталануы болды. Тыныс алу жолының инфекциясымен ауырған жүкті әйелдерде жүктіліктің ағымы гипертензиялық жағдайлармен асқынды 46,7%, гестацияның әртүрлі мерзімдерінде жүктіліктің үзілу каупі – 33,3%.

Босану ағымының асқынуларының ішінде босануға дейінгі қағанақ қуығының жарылуын жүкті әйелдердің 20,0%, әрбір төртінші әйелде (26,7%) босану жарақатымен (қынап және аралықтың) асқыну болды, әрбір оныншы әйелде (10,0%) жүктіліктің 35-36 апталарында мерзімінен ерте босану. Жүктілік кезіндегі тыныс алу жүйесінің жедел инфекциясын уақытында анықтау және комплексті антибактериалды, вирусқа қарсы, симптоматикалық терапия босанғаннан кейінгі кезеннің қолайлы өтуіне әсерін тигізеді.

**Түйін сөздер:** тыныс алу жүйесінің жедел инфекциясы, жүктілік, жүктіліктің асқынуы, босану, босанғаннан кейінгі кезең.

### **РЕЗЮМЕ**

БИЩЕКОВА Б.Н.¹, УМИРОВА Р.У.¹, АЙГЫРБАЕВА А.Н.¹, МУХАМЕДЖАНОВА Ж.А.¹, ХОН А.¹, КАЛИДИНОВА А.¹, ШИНТАСОВА Н.¹, ¹Национальный медицинский университет имени С.Д. Асфендиярова, г. Алматы

# ТЕЧЕНИЕ БЕРЕМЕННОСТИ, РОДОВ И ПОСЛЕРОДОВОГО ПЕРИОДА ПРИ ОСТРЫХ ИНФЕКЦИЯХ ДЫХАТЕЛЬНОЙ СИСТЕМЫ

В структуре острых инфекций дыхательной системы во время беременности на первом месте располагается острая респираторная вирусная инфекция (40,0%), на втором – острый трахеобронхит (30,0%), на третьем – острый фарингит (20,0%). У превалирующего большинства беременных пациенток (76,7%) инфекции дыхательной системы отмечены в третьем триместре беременности, что подтверждает роль естественного снижения иммунорезистентности беременных (преимущественного в III триместре) в ходе развития инфекционной патологии респираторного тракта. Отметим, что у каждой пятой больной (20,0%) наблюдался рецидив инфекции после проведенного стационарного лечения. Наиболее частыми осложнениями беременности после перенесенной острой инфекции органов дыхания являются артериальная гипертензия (46,7%), угроза прерывания беременности в различные сроки гестации (33,3%). Среди осложнений течения родов следует выделить дородовый разрыв плодных оболочек, выявленный у каждой пятой (20,0%) обследованной, родовой травматизм, то есть разрыв влагалища и промежности – у каждой четвертой роженицы (26,7%), у каждой десятой (10,0%) - преждевременные роды на сроке 35-36 недель беременности. Своевременная диагностика и комплексная антибактериальная, противовирусная, а также симптоматическая терапия острых инфекций дыхательной системы во время беременности во многом способствуют благоприятному течению послеродового периода.

**Ключевые слова:** острые инфекции дыхательной системы, беременность, осложнения беременности, роды, послеродовый период.

#### References:

- 1. Раева Р.М., Кегенбекова А.С. и другие. Акушерские и перинатальные исходы при острых вирусных инфекциях. Вестник КазНМУ. 2013. №4. С. 20-21.
- 2. Акушерство. Национальное руководство. Под редакцией Айламазяна Э.К., Кулакова В.И., Радзинского В.Е., Савельевой Г.М.. М.: ГЭОТАР-Медиа,. 2014, с. 387-397.
- 3. Шехтман М.М. Руководство по экстрагенитальной патологии у беременных. Москва: MedBooks, 6 издание, 2013 г., 896 с.
- 4. Jhung M.A., Epperson S., Biggerstaff M., Allen D., Balish A., Barnes N., et al. Outbreak of variant influenza A(H3N2) virus in the United States. Clin Infect Dis. 2013; 57: 1703-1712.
- 5. Майоров М.В, Жуперкова Е.А., Жученко С.И. Беременность и заболевания органов дыхания. Провизор. 2011. №4. С. 24-28.
- 6. Valenzuela-Méndez B., Valenzuela-Sánchez F., Rodríguez-Gutiérrez J.F. Pregnancy and Influenza Respiratory Infection. Implications of Immunological Alterations, Clinical Repercussion and Current Basis of Management and Prevention, 2016. [Electronic resource]: https://www.researchgate.net/institution.
- 7. Clinical Protocol of diagnosis and treatment "Caesarean section". Approved by the Expert Commission on health development of the Ministry of health of the Republic of Kazakhstan Protocol №10 of 04 July 2014. [Electronic resource]: http://www.rcrz.kz/docs/clinic\_protocol/2014.