

RISK FACTORS AND EPIDEMIOLOGY OF ACUTE AND RECURRENT OBSTRUCTIVE BRONCHITIS IN CHILDREN

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Abstract. Relevance. Diseases of the respiratory system remain one of the urgent problems in pediatrics in terms of morbidity and complications among children. Acute asthma and bronchitis, which are often observed in young children, can lead to negative consequences when observed with broncho-obstructive syndrome. The growing trend of acute respiratory diseases in children and their role in the development of broncho-obstructive syndrome, relapses of obstructive bronchitis, the high frequency of recurrent bronchitis and the high risk of developing bronchial asthma indicate the need for further study of the disease. Among the factors leading to the development of broncho-obstructive syndrome, respiratory infections are observed in 5-40% of cases and occupy a leading place.

Purpose of the study. Risk factors for the development of broncho-obstructive syndrome and their distribution in the conditions of the Ferghana Valley of Uzbekistan.

Research methods and materials. An epidemiological analysis was carried out using statistical methods to assess risk factors for the development of broncho-obstructive syndrome. The anamnesis of children aged 1 to 18 years hospitalized in 2017-2021 was analyzed. to the department of «Pulmonology» of the Andijan Regional Children's Multidisciplinary Medical Center. In a retrospective study, a total of 6965 patients were examined, of which 1208 (17%) were diagnosed with broncho-obstructive syndrome. 1208 patients diagnosed with broncho-obstructive syndrome were divided into 3 nosological groups: 1- group: 966 people (80%) with acute community-acquired broncho-obstructive syndrome. 2-group of acute obstructive bronchitis 72 people (6%), 3- group of recurrent obstructive bronchitis 170 people (14%).

Results of the study and their discussion. A retrospective analysis of the disease history shows the presence of various risk factors in the development of symptoms of respiratory failure, frequent observation of RD and a high risk of developing bronchial asthma, the coexistence of background diseases, and age differences. According to the data obtained, the symptoms of bronchial obstruction were observed in all children. Based on a retrospectively analyzed history, acute obstructive bronchitis was detected in 942 (78%) children with frequent acute respiratory infections (6 times or more) during the year, in 290 (24%) with diseases of the ENT organs, in 318 (26.3%) with allergic conditions., 273 (22.6%) formula-fed children, 832 (68.9%) cases of maternal anemia, 824 (68.2%) cases of complicated pregnancy. Conclusion. Predisposing factors and risk factors for the development of broncho-obstructive syndrome: severe pregnancy, anemia in the mother, asphyxia during childbirth, artificial feeding of the child, allergic tendency of the body, frequent acute respiratory infections, pathologies of ENT organs, protein-energy deficiency., hereditary and congenital diseases of the respiratory system.

Key words. broncho-obstructive syndrome, risk factors, retrospective analysis, pneumonia, acute obstructive bronchitis, recurrent bronchitis.

Dolzarbliji. Bolalar orasida kasallanish ko'rsatkichi va asoratlari bo'yicha nafas olish tizimi kasalliklari pediatriyada dolzarb muammolardan biri sifatida qolmoqda [1,4]. Go'dak yoshli bolalarda ko'p kuzatiladigan o'tkir zotiljam va bronxitlar bronxoobstruktiv sindrom (BOS) bilan kuzatilganda salbiy oqibatlarga olib kelishi mumkin. Maxalliy va xorijiy olimlar tomonidan o'tkazilgan ko'plab ilmiy tadqiqotlar va izlanishlar natijalariga ko'ra bronxoobstruktiv sindrom kuzatilishi 2,1% dan 40,0% gacha bolalarda xayotining dastlabki 6 yoshiga to'g'ri kelganligi kuzatilgan [2]. Bolalarda o'tkir respirator kasalliklarning o'sish tendensiyasi va ularning broxial obstruksiya rivojlanishidagi roli, obstruktiv bronxitni kaytalanishi yani so'ngi vaqtarda retsidiv bronxitni ko'p kuzatilishi va bronxial astma xavfi yuqoriligi kasallikni yanada ko'prok o'rganish kerakligini ko'rsatmoqda. Bronxoobstruktiv sindrom mustaqil kasallik emas, simptomokompleks sifatida namoyon bo'lib, nafas chiqarishning uzayishi, bo'g'ilish xurujlari, shovqinli nafas olish, nafas olishda yordamchi muskullar ishtiroki, masofadan xirillashni eshitilishi, ekspirator tipdag'i xansirash va kam maxsulotli yo'tal bo'lishi bilan xarakterlanadi. BOS rivojlanishiga moyillik tug'diruvchi bir qator omillar mavjud. Ular orasida respirator infeksiyalar 5-40% xollarda kuzatilib,

etakchi o'rinni egallaydi [2,3,4]. Bundan tashqari anatomo-fiziologik xususiyatlar, onadagi asoratlangan xomiladorlik, tug'ruqning og'ir o'tishi, xomiladorlik vaqtidagi toksikozlar va anemiya, LOR a'zolari kasalliklari, tez-tez ORI bilan kasallanish, xomila ichi gipoksiyasi, allergik anamnezlar, raxit, oqsil-energiya etishmovchiligi, chala tug'ilish, perinatal ensefalopatiya, suniy ovqatlanish, ekologik sharoitning nomutanosibligi, passiv chekish kabilar moyillik tug'diruvchi omillar xisoblanadi. [2,3,6]. Etiologiyasi va patogenetik mexanizmlariga qarab bronxoobstruktiv sindromni 4 ta turi bor: Infektion - aksariyat viruslar, kam xolatlarda bakteriyalar xisobiga bronx va bronxiolalarning yallig'lanishi bilan kechuvchi; allergik- bronxlarni allergik yallig'lanishi va spazmi sababli rivojlanuvchi; obturatsion - yet jismdan aspiratsiya va bronxlarning siqlishi kuzatilishi; gemodinamik- tug'ma yurak nuqsonlari, chap qorinchaga bog'liq yurak etishmovchiligi sababli rivojlanuchi. Ko'pincha bronxoobstruktiv sindrom bronxpulmonar patologiyasi bor bolalarda kuzatiladi. Bolalarda 5% xolatlarda bronxpulmonar displaziya bronxial obstruksiya bilan kechadigan kasalliklar tarkibiga kiradi. Kasallikni kechishi bo'yicha bronxoobstruktiv sindromni o'tkir, cho'zilgan, qaytalanuvchi, uzlusiz qaytalanuchi turlarga bo'lish mumkin. Obstruksiyanı namoyon bo'lishiga ko'ra engil, o'rtalig'ir, og'ir va yashirin obstruksiyalarga ajratiladi. Bronxoobstruktiv sindromni og'irlik darajasi klinik belgilariqa qarab xarakterlanadi.

Tadqiqot maqsadi. Bronxoobstruktiv sindrom rivojlanish xavf omillari va ularni O'zbekistonning Farg'ona vodiysi sharoitida tarqaganligini retrospektiv o'rganish.

Tadqiqot usullari va materiallari. Bronxoobstruktiv sindrom (BOS) rivojlanish xavf omillarini baxolash uchun statistik usullar bilan epidemiologik taxlil o'tkazildi. Tekshirish uchun Andijon viloyati bolalar ko'p tarmokli tibbiyot markazi "Pulmonologiya" bo'limida 2017-2021 yillarda yotib davolangan, 1yoshdan 18 yoshgacha bo'lgan bemor bolalar kasallik tarixi retrospektiv taxlil qilindi. Retrospektiv tekshiruvda jami 6965 nafar bemor kasallik tarixi o'rganildi, shundan 1208 nafariga (17%) BOS tashxisi qo'yilgan. BOS tashxisi qo'yilgan 1208 nafar bemor 3 ta nazologik guruxga bo'lib o'rganildi: 1-gurux BOS shifoxonadan tashqari zotiljam o'tkir kechishi bilan 966 nafar (80%). 2-gurux Obstruktiv bronxit o'tkir kechishi (O'OB) 72 nafar(6%), 3-gurux Obstruktiv bronxit retsdiv kechishi (RB)170nafar (14%).

BOS o'ziga xos xususiyatlarini aniqlash va tashxis qo'yish maqsadida paraklinik tekshiruvlar: umumiy qon, siyidik, axlat taxlili, ko'krak qafasi organlari rentgenologik tekshiruvi, pulsoksimetriya va mutaxassislar xulosasi taxlil qilindi. Nazoliyi va yoshi bo'yicha bemorlarni taqsimlanishi 1- jadvalda keltirildi.

Jadval-1
Nazoliyi va yoshi bo'yicha bemorlarni taqsimlanishi.

Yoshi	BOS shifoxonadan tashkari zotiljam bilan		Obstruktiv bronxit o'tkir kechishi		Obstruktiv bronxit retsdiv kechishi		Jami yosh bo'yicha	
	abs	%	abs	%	abs	%	abs	%
1-3 yosh	800	83	32	44	41	24	873	73%
4-6 yosh	125	13	16	24	52	30.5	193	16%
7-11 yosh	32	3	18	25	52	30.5	102	8%
12-18 yosh	9	1	6	7	25	15	40	3%
Jami	966	100	72	100	170	100	1208	100%

BOS bilan ro'yxatga olingan bolalar yoshga qarab taqsimlanganda 1-3yosh 873 nafar (73%), 4-6 yosh 193 nafar(16%), 7-11yosh 102 nafar(8%), 12-18yosh 40nafar(3%) uchraganligi aniqlandi. Bularidan qiz bolalar 480ta (40%)ni, o'g'il bolalar 728ta(60%)ni tashkil qilgan.

BOS bilan ro'yxatga olingan bolalarni yoshi va jinsga qarab taqsimlaganimizda, bularidan qiz bolalar 480ta (40%)ni, o'g'il bolalar 728ta(60%)ni tashkil qilgan. 1-3 yoshli bolalarda BOS eng ko'p kuzatigan bo'lib, o'g'il bolalarda 550 ta(46%) , qiz bolalarda 323ta (27%) aniqlandi.

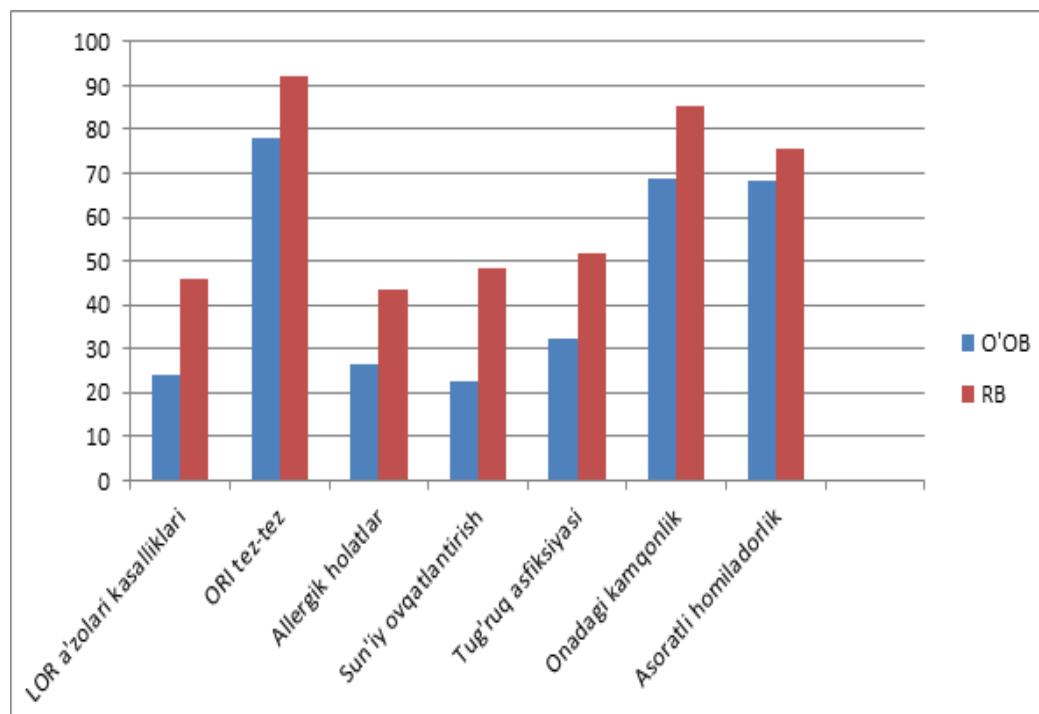
Jadval-2

Nazologiya bo'yicha yoshga va jinsga taqsimlanishi

Yoshi	Shifoxonadan tashkari zotiljam obstruktiv sind				Obstruktiv bronxit o'tkir kechishi				Obstruktiv bronxit rekurent kechishi				Jami			
	O'g'il bolalar		Qiz bolalar		O'g'il bolalar		Qiz bolalar		O'g'il bolalar		Qiz bolalar		O'g'il bolalar		Qiz bolalar	
	abs	%	abs	%	abs	%	abs	%	abs	%	abs	%	abs	%	abs	%
1-3 yosh	513	53	287	30	16	22	16	22	21	12	20	11	550	46	323	27
4-6 yosh	73	8	52	5	11	15	6	8	27	16	25	15	111	9	83	7
7-11 yosh	14	1	18	2	9	13	8	11	27	16	25	15	50	4	51	4
12-18yosh	7	0.7	2	0.3	2	3	4	6	8	5	17	10	17	1	23	2
Jami	607	62,7	359	37,3	38	53	34	47	83	49	87	51	728	60	480	40

Tadqiqot natijalari va ularni muxokama qilish. Anamnestik ma'lumotlarga asoslanib, BOSni kelib chiqishiga moyillik tug'diruvchi xavf omillari aniqlandi va taxlil qilindi. Bemorlardan yig'ilgan anamnezlarda xomiladorlikning og'ir yoki asoratli kechishi, tug'ruqning travma bilan kechganligi, onadagi anemiya, ona yoshining kattaligi, bolalarda fon kasalliklar raxit, anemiya, oziqlanishning buzilishi, allergik xolatlar, suniy ovqatlantirish, tez-tez ORI bilan og'rish, LOR a'zolari patologiyalari, noqlay ekologik sharoitlar bo'lganligi aniqlangan. Quyidagi jadvalda O'OB va RB rivojlanishiga moyillik tug'diruvchi turli omillar va ularni uchrash chastotasi keltirilgan.

Diagramma-1.
Bronxoobstruksiya shakllanishiga moyillik tug'diruvchi va xavf omillar



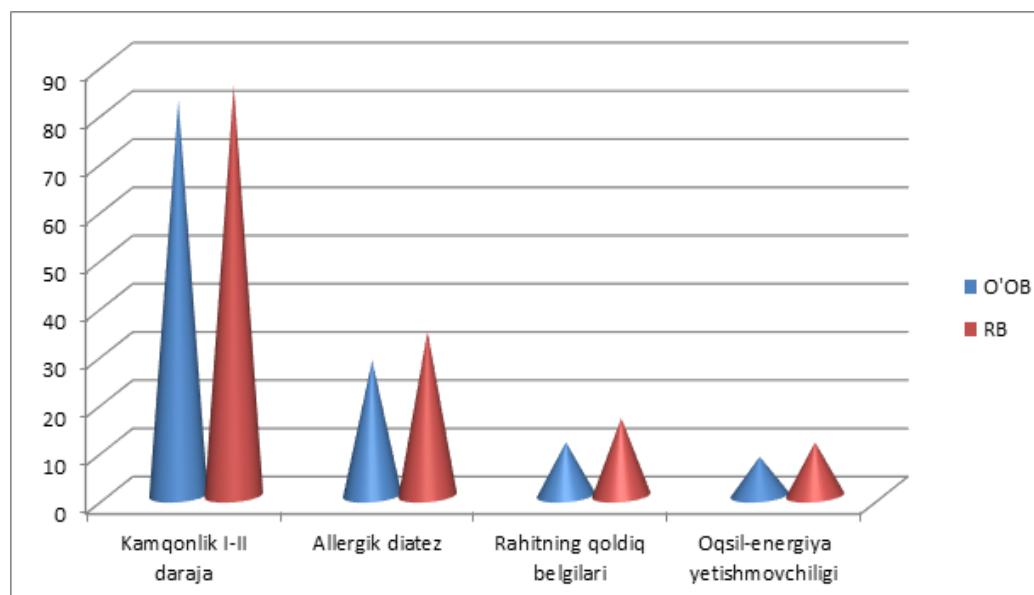
BOS rivojlanishiga xavf omili sifatida kuzatilgan bolalardagi fon kasalliklari va ularning uchrash chastotasi retrospektiv taxlil qilganimizda kuyidagilar kuzatildi.

Bundan tashqari fon kasalliklarini RB va O'OB kuzatilagan bolalar guruxlarida taxlil qilganimizda BOS bor 85% bolalarda I-II-darajali kamqonlik, 34% allergik diatez, 16%da raxitni qoldiq belgilari va 11% bemorlarda oqsil-energiya etishmovchiligi kuzatilganligini aniqladi. BOS bolalardagi klinik simptomlarning uchrash chastotasi taxlil qilinganda RBning asosiy klinik simptomiy yo'tal bo'lib, bemorlarning 90,8%da asosan namyo'tal, sianoz 73,8%, xansirash 93,8%, bemorlarning 100%da nam, 64%da quruq xirillash kuzatilgan.

Kasallik tarixini retrospektiv taxlil qilish natijalar nafas etishmovchiligi belgilarining rivojlanishida, RBni ko'p kuzatilishi va bronxial astma xavfini yuqoriligi, ularning rivojlanishidagi turli xil xavf omillar, fon kasalliklarning birga kelishi, yosh farqli mavjudligini

ko'rsatadi. Olingen ma'lumotlarga ko'ra broxxobstruksiya simptomlari barcha bolalarda kuzatilgan. Tez-tez kuzatiladigan va nam yo'tal bemorlarning 90,8%da kuzatilgan. Tashxisni tasdiqlash va qiyosiy tashxislash uchun ko'krak qafasi rentgenologik tekshiruv malumotlari o'rganilan. Xushtaksimon xirillash va ekspirator tipdagi xansirash BOSning asosiy klinik simptomlari bo'lib barcha bemorlarda kuzatilgan. Retrospektiv taxlil qilingan kasallik tarixidagi anamnezlarga asosan o'tkir obstruktiv bronxit (O'OB) yil davomida tez-tez ORI (6 marta va undan ko'p) bilan og'rigan bolalarda 942(78%), LOR a'zolari kasalliklari bilan 290(24%), allergik xolatlar 318(26,3%), suniy ovqatlantirilayotgan bolalarda 273(22,6%), onadagi kamqonlik 832(68,9%), asoratli xomiladorlik 824(68,2%) xolatlarda aniqlandi.

Diagramma-2
BOS kuzatilgan bolalarda fon kasalliklarni uchrashi (%)



Adabiyotlarda keltirilgan malumotlarga ko'ra BOS rivojlanishida nafaqat onadagi kasalliklar balki onaning yoshi, qayta xomiladorlik va tug'ruqlar sonining ko'pligi va xomiladorlik orasidagi intervalning qisqaligi xam xavf omillar qatoriga kiritilgan [5]. Bu esa nafas olish tizimiga salbiy tasir ko'rsatuvchi atmosferaning ifloslanishi, noqulay ekologik muxitda yashagan katta yoshdagи xomiladorlik bilan bog'liq bo'lib, ushbu omillarning xomilador ona organizmiga uzoq vaqt tasiri natijasida bronxlarda giperrektivlik rivojlanishiga va keyinchalik bronxoobstruktiv sindrom paydo bo'lismiga olib keladi. Bundan tashqari fon kasalliklarini RB va O'OB kuzatilagan bolalar guruxlarida taxlil qilganimizda BOS bor 85% bolalarda I-II-darajali kamqonlik, 34% allergik diatez, 16%da raxitni qoldiq belgilari va 11% bemorlarda oqsil-energiya etishmovchiligi kuzatilganligini aniqladik. BOS bolalardagi klinik simptomlarning uchrash chastotasi taxlil qilinganda RB asosiy klinik simptomi yo'tal bo'lib, bemorlarning 90,8%da asosan nam yo'tal, sianoz 73,8%, xansirash 93,8%, bemorlarning 100%da nam, 64%da quruq xirillash kuzatilgan.

Xulosa. BOS rivojlanishiga moyillik tug'diruchi va xaf omillari: xomiladorlikning og'ir kechishi, onadagi kamqonlik, tug'ruq vaqtidagi asfaksiya, bolaning suniy oziqlanishi, organizmning allergik moyilligi, tez-tez ORI lar bilan kasallanish, LOR a'zolari patologiyalari, oqsil-energiya etishmovchiligi, irlsiy va tug'ma nafas olish tizimi kasalliklari ekanligi kuzatildi. YUqorida ma'lumotlardan ko'rinish turibdiki, BOS rivojlanishini oldini olish birlamchi bo'g'in shifokorlari, oila shifokorlari profilaktik tadbirlarni o'z vaqtida va to'g'ri tashkillashtirishlari lozim.

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