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RETROSPECTIVE ANALYSIS OF THE DIAGNOSIS OF COMMUNITY-ACCOMPANY PNEUMONIA IN CHILDREN

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Abstract. Diseases of the respiratory system remain one of the urgent problems in pediatrics in terms of morbidity rate and complications among children. The purpose of the study is to retrospectively analyze the diagnosis of pneumonia outside the hospital in children. Materials and styles. 2019-2022 in the pediatric pulmonology department of the TTA multidisciplinary clinic with the diagnosis of pneumonia outside the hospital. retrospective analysis of medical history of treated children aged 3-18 years. Results. It became known that today, for clinical practice, there are the following difficulties in differentiating bacterial pneumonia outside the hospital from the viral type, which require their own solution: that is, the use of antibiotics before bacterial inoculation; the difficulty of obtaining a reliable sample of sputum from the respiratory tract in young children; application of the molecular diagnosis method in a narrow scope. The development of diagnostic tests with a high level of specificity and sensitivity in determining the etiology of pneumonia in sick children is considered highly effective for the activities of medical care institutions.

Key words. child, pneumonia, retrospective analysis, bacterial inoculation.

Kirish. Ma'lumki, bolalardagi kasalxonadan tashqari pnevmoniya (KTP) butun dunyo bo'ylab bolalar o'limining asosiy sabablaridan biridir. Ushbu hol Covid-19 epidemiyasi davrida yana bir bor o'z tasdigini topdi va bunday vaziyatda pnevmoniya etiologiyasini erta aniqlash katta ahamiyatga ega ekanligini ko'rsatdi. Jamoatchilik, ya'ni butun dunyo aholisi salomatligi nuqtai - nazaridan olib qaralganda, kasalxonadan tashqari pnevmoniyaning etiologiyasi qanchalik tez aniqlansa, bemorni davolashda antibiotiklardan maqsadli foydalanish, davo tarkibidan erta chiqarib tashlash va bemorni muolajaga erta moslashuvda yaqindan yordam beradi. Iqtisodiy jihatdan esa, antibiotiklarni moliyaviy guruhlarga ajratish hamda bolalar salomatligini saqlashda immunizatsiya dasturlari bajarilishini kuchaytirishga ustuvor ahamiyat berishni ta'minlaydi (1, 10, 12, 13).

Tadqiqot maqsadi. Bolalarda kasalxonadan tashqari pnevmoniya tashxisini retrospektiv tahlil qilish.

Material va uslublar. Kasalxonadan tashqari pnevmoniya tashxisi bilan TTA ko'p tarmoqli klinikasi bolalar pulmonologiyasi bo'limida 2019-2022yy. davolagan 3-18 yoshdagi bolalarning kasallik tarixini retrospektiv tahlil qildik.

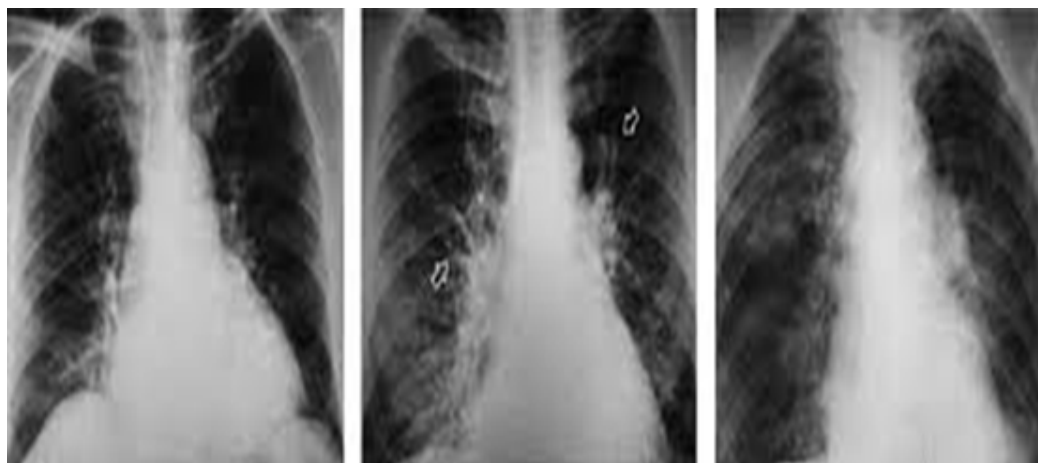
Natijalar va muxokama. Retrospektiv tahlil natijalari kasallikning klinik kechishi bo'yicha bakterial, atipik bakterial va virusli pnevmoniyalar klinik simptomlarining (yotal, isitma, entikish) ko'pincha bir xil bo'lishini (100,0%; 86,0%; 88,0%) va shuning uchun ham turli xil etiologiyali pnevmoniyalarni ishonchli tarzda ajratib bo'lmasligini tasdiqladi ($P < 0,001$) (1,2,3 rasmlar).



1-rasm. Pnevmonokokkli pnevmoniya.



2-rasm. Xlamidiyal pnevmoniya.



3-rasm. Virusli pnevmoniya.

Adabiyot manbalariga mos ravishda bemorlar kasallik tarixi tahlilida pnevmoniyaning aynan bakterial etiologiyasini tasdiqlovchi yuqori harorat (98,0%), og'ir taxipnoe (84,0%), miyalgiya (67,0%), va local auskultativ topilmalar (90,0%) aniqlandi ($P < 0,001$) [3, 4]. Bundan farqli o'laroq, bolada subfebril isitma (88,0%), burun oqishi (75,0%), xirillash (84,0%) va ikki tomonlama diffuz o'pka belgilari (89,0%) ham aniqlandiki, bu pnevmoniyaning virusli etiologiyasini tasdiqlaydi ($P < 0,001-0,01$) [2,7,11].

Ma'lumki, bolalarda ko'pincha mikoplazmali pnevmoniyaga moyillik kuzatiladi va kasalxonadan tashqari pnevmoniya bilan og'rikan bolalarning 10-40%da yosh bolalarga nisbatan katta bolalarda ko'proq qayd qilinadi. Ko'krak qafasi auskultatsiyasida tarqoq, mahalliy va ekspirator xirillashlar aniqlanadi [5,6]. Tahlilimiz natijasiga ko'ra, bolalarda mikoplazmali pnevmoniyaning klinik ko'rinishini tasdiqlovchi uzoq davom etuvchi yuqori isitma (60,0%), qaltirash (58,0%), tomoq og'rig'i (63,0%) va yo'tal bilan birga «grippga o'xshash» sindrom (75,0%) aniqlandi ($P < 0,001-0,01-0,05$).

Ma'lumki, pnevmoniyaning empirik kechishida noaniq klinik belgilar, yuqori isitma, ikki yoshgacha bo'lgan bolalarda respirator distress-sindrom, timusnins funksional etishmovchiligi, antibiotiklarga past sezgirlik, asoratlar aniqlanishi va bemor umumiy axvolining tez yomonlashuvi ko'krak qafasi rentgenografiyasiga ko'rsatma bo'lib hisoblanadi [6, 7, 8, 9, 14].

Bizning tekshiruvimizda lobar va segmentar shikastlanishlar asosan bakterial etiologiyali (55,0%), interstitsial infiltratlar, peribronxial qalinlashuvlar esa asosan virusli (65,0%) va mikoplazmali (57,0%) pnevmoniyada aniqlandi ($P < 0,001-0,01$) (4,5,6 rasmlar).



4-rasm. Stafilokokkli pnevmoniya.

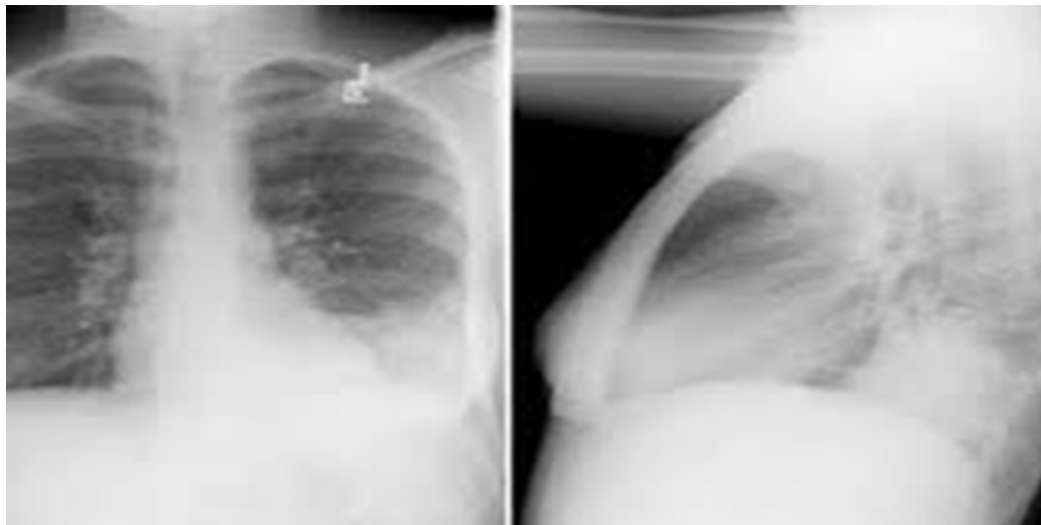


5-rasm. Mikoplazmali nevmoniya.

Ta'kidlash joizki, o'pka ultratovush tekshiruvini plevral suyuqliklar va empiemani aniqlash uchun asosiy tashxis vositasi sifatida qollaniladi [6]. Bizning tekshiruvlarimizda virusli va bakterial pnevmoniyaning farqlashda asosan klinik va laboratoriya parametrlaridan foydalanilgan.

Bolalarda pnevmoniyaning laborator tekshiruv usullari natijasida klinik amaliyot

uchun eng ko'p qo'llaniladigan biomarkerlarga leykotsitlar (L) soni va C-reaktiv oqsil (CRO) kiradi. Bu o'rinda qondagi prokalsitonin (PKT) biomarkerini aniqlash eng yangi usul bo'lib hisoblanadi. Biroq, bemorlarni davolashda ushbu biomarkerlarning hech birini alohida talqin qilish tavsiya etilmaydi. Gaptoglobin, metalloproteinaza-1, interleykin-19 va o'sma nekrozi faktori (TNF) to'qimalarining ingibitori kabi biomarkerlar mavjud bo'lib, ular ham asosan ilmiy tadqiqotlarda qo'llanib kelinmoqda.



6-rasm. Segmentar pnevmoniya.

Kattalarda balg'am namunasini Gram usuli bo'yicha bo'yash va ekish ko'pincha etiologik tashxisni aniqlashga yordam beradi. Biroq, yosh bolalardan sifatli namuna olish ko'pincha qiyin kechadi. Bu usulda namuna sifati epitelial hujayralar soni (<10/EC) va polimorfonuklear leykotsitlar (>25/EC) [10] soni bilan belgilanadi.

Balg'am chiqarish balgamni yotal bilan ajratishda yoki burun teshigi orqali aspiratsiya qilish yo'li bilan sifatli balg'am namunasi olinadi. Induktsiya qilingan namunalarda mikroorganizmlarning aniqlanishi yaxshiroq bo'lsada, balg'am ishlab chiqarishni muntazam ravishda qollash mumkin emas. Bu bemor uchun muolajaning noqulayligi va nojo'ya ta'sirlarining mavjudligi sabablidir. Umuman olganda, yuqoridagi usullar yordamida olingan balg'am turi yuqori nafas yo'llarida simptomsiz mikroorganizmlarning kontaminatsiyasi tufayli kam darajada o'ziga xoslikka ega [10,11,12].

Serologik testlar natijalarini bemorlarni tekshiruv jarayonida muntazam qo'llash yuqori darajada ma'lumot bermaydi. Bu o'rinda mikoplazma infeksiyasi ham bundan mustasno emas, o'tkir infeksiya paytida IgG yoki IgM antigenlariga qon zardobidan bitta namuna olish o'ziga xoslik va sezgirlikka ega bo'lmaydi.

Pnevmoniya tashxisida qondagi antigenlarni aniqlash samarali qo'shimcha usul hisoblanadi. Bugungi kunda respirator sinsitial virus (RSV) antigennini tezkor aniqlash testi tez natijalar chiqishi va qulayligi tufayli molekulyar tashxis usullari bilan taqqoslanganda tibbiyotda keng qo'llaniladi. Bu usul ayniqsa, gripp epidemiyasi davrida samarali hisoblanadi.

Hozirgi kunda COVID-19 pandemiyasidan keyin xam tezkor antigenlarga tekshiruvlar keng qo'llanilmoqda. Bu usul bir vaqtning o'zida bir nechta mikroorganizmlarni bitta PCR reaksiyasida aniqlay oladi va oz miqdordagi DNK yoki RNKni replikasiya qiladi, tirik organizmlarni talab qilmaydi va avvagi antibiotiklar qabul qilingani bilan bog'liq emas.

Ta'kidlash joizki, keying yillarda COVID-19 pandemiyasiga javoban olib borilayotgan ilmiy tadqiqotlarning soni yildan-yilga ortib borayotgani kuzatilmoqda. Ko'plab tadqiqotlarda koronavirusning yangicha klinik ko'rinishi va tashxis usullari o'rganilmoqda. Bu o'rinda bolalardagi COVID-19 koronavirusining nazofaringit (55,3%) shaklida engil kechishi aniqlandi. Ba'zi holatlarda kasallikning to'liq simptomsiz (4,4%), o'rtacha og'irlikda gipoksemiya yoki nafas olish etishmovchiligisiz pnevmoniyaning tipik simptomlari va belgilari bilan namoyon bo'lishi kuzatilmoqda [7, 12, 13].

Xulosalar. Shunday qilib, retrospektiv tahlil natijasida aniqlandiki, bugungi kunda klinik amaliyot uchun kasalxonadan tashqari bacterial pnevmoniyani virusli turidan farqlashda quyidagi o'z echimini talab etuvchi qiyinchiliklar mavjud: ya'ni antibiotiklarni bacterial ekmadan oldin qo'llash; kichik yoshdagi bolalarda nafas olish yollaridan balgamning ishonchli namunasini olishning qiyinligi; molekulyar tashxis usulining tor

doirada qo'llanilishi.

Bemor bolalarda pnevmoniya etiologiyasini aniqlashda yuqori darajada o'ziga xoslik va sezuvchanlikka ega bo'lgan tashxis testlarini ishlab chiqish tibbiy yordam muassasalari faoliyati uchun yuqori samara bo'lib hisoblanadi.

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