

TEZ-TEZ KASAL BO'LADIGAN BOLALARDA MAHALLIY HUYAYRA IMMUNITETI VA FARINGEAL MORFOLOGIYA

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LOCAL CELLULAR IMMUNITY AND PHARYNGEAL MORPHOLOGY IN FREQUENTLY ILL CHILDREN

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ANOTATSIYA (O'ZBEK TILIDA)

Dolzarbliqi: Orofaringeal shilliq qavat va Valdeyer-Pirogov limfoepitelial halqasi nafas olish yo'llari patogenlariga qarshi asosiy himoya to'sig'i hisoblanadi. Tez-tez kasal bo'ladigan bolalarda doimiy antigen faringealning gistologik tuzilishini qayta qurishga va mahalliy himoya mexanizmlarining kamayishiga olib keladi.

Tadqiqot maqsadi: Tez-tez kasal bo'ladigan bolalarda faringeal shilliq qavatdagi morfofunktsional o'zgarishlar bilan bog'liq holda orofaringeal mahalliy hujayra immunitetining holatini baholash.

Material va usullar: 3 yoshdan 7 yoshgacha bo'lgan 50 nafar tez-tez kasal bo'ladigan bola va 25 nafar sog'lom tengdoshi (nazorat guruhi) tekshirildi. Mahalliy hujayra immuniteti neytrofil fagotsitozi hamda limfotsitlar fenotipi ($CD4^+$, $CD8^+$, $CD20^+$) orqali, morfologiya esa endoskopik va sitologik usullar bilan o'rganildi.

Natijalar: Bemorlarning 72% ida limfoid granulalarning II-III darajali giperplaziyasi, epiteliy metaplaziyasi aniqlandi. Bronxitli bolalarda $CD4^+/CD8^+$ nisbati $0,9 \pm 0,08$ gacha pasaygani ($p < 0,05$) va fagotsitar faollik 35% ga kamaygani kuzatildi.

Xulosa: Mahalliy immunitet tanqisligi epiteliy metaplaziyasiga va shilliq qavatning infeksiya o'chag'iga aylanishiga olib keladi, bu esa lokal immunokorreksiyaning talab etadi.

Kalit so'zlar: tez-tez kasal bo'ladigan bolalar, orofaringeal shilliq qavat, mahalliy hujayra immuniteti, fagotsitoz, T-limfotsitlar ($CD4^+/CD8^+$), limfoid giperplaziya, metaplaziya, immunokorreksiya.

ABSTRACT (ENGLISH)

Background: The oropharyngeal mucosa and the Waldeyer-Pirogov lymphoepithelial ring serve as the primary protective barrier against respiratory pathogens. In frequently ill children, persistent antigenic exposure leads to histological remodeling of the pharyngeal tissue and a decline in local defense mechanisms.

Objective: To evaluate the state of oropharyngeal local cellular immunity in relation to morphofunctional changes in the pharyngeal mucosa among frequently ill children.

Materials and Methods: A study group of 50 frequently ill children aged 3 to 7 years was examined alongside a control group of 25 somatically healthy peers. Local cellular immunity was assessed using neutrophil phagocytosis and lymphocyte phenotyping ($CD4^+$, $CD8^+$, $CD20^+$). Mucosal morphofunctional status was studied via endoscopic and cytological methods.

Results: Persistent grade II–III hyperplasia of lymphoid granules was found in 72% of patients along with epithelial metaplasia. In children with bronchitis, the $CD4^+/CD8^+$ ratio decreased to 0.9 ± 0.08 ($p < 0.05$), and neutrophil phagocytic activity dropped by 35%.

Conclusion: Chronic deficiency in local cellular immunity drives compensatory lymphoid hyperplasia and metaplasia, requiring local immunocorrection strategies.

Keywords: frequently ill children, oropharyngeal mucosa, local cellular immunity, phagocytosis, T-lymphocytes ($CD4^+/CD8^+$), lymphoid hyperplasia, metaplasia, immunocorrection.

KIRISH

Orofaringeal shilliq qavat va Valdeyer-Pirogov limfoepitelial halqasi nafas olish yo'llari patogenlariga qarshi asosiy himoya to'sig'i hisoblanadi. Tez-tez kasal bo'ladigan bolalarda doimiy antigen faringealning gistologik tuzilishini qayta qurishga va mahalliy himoya mexanizmlarining kamayishiga olib keladi. Surunkali yallig'lanish patogenezini tushunish va maqsadli terapiyalarni ishlab chiqish uchun shilliq qavatdagi morfologik o'zgarishlar va mahalliy hujayra immuniteti ko'rsatkichlari o'rtasidagi bog'liqlikni o'rganish zarur.

TADQIQOT MAQSADI

Tez-tez kasal bo'ladigan bolalarda faringeal shilliq qavatdagi morfofunktsional o'zgarishlar bilan bog'liq holda orofaringeal mahalliy hujayra immunitetining holatini baholash.

MATERIALLAR VA USULLAR

Tez tez kasal bo'ladigan bolalar guruhini (o'rganish guruhi) tashkil etuvchi 3 yoshdan 7 yoshgacha bo'lgan ellik nafar bola tekshirildi. Nazorat guruhiga 25 ta somatik sog'lom tengdoshi kiritildi. Mahalliy hujayra immuniteti og'iz suyuqligidagi neytrofil fagotsitoz va faringeal smearlarda limfotsit fenotipi ($CD4^+$, $CD8^+$ va $CD20^+$ bilan immunotsitokimyo) yordamida baholandi. Shilliq qavat va bodomsimon bezlarning morfologik xususiyatlari endoskopik va sitologik usullar yordamida tekshirildi.

OLINGAN NATIJALAR

Tez tez kasal bo'ladigan bolalar guruhidagi bolalarda orofarenksning limfoid to'qimasida va epitelial qoplamasida sezilarli strukturaviy o'zgarishlar kuzatildi. Orqa faringeal devor va tanga bodomsimon bezlarida limfoid granulalarning II-III darajali doimiy giperplaziyasi bemorlarning 72 foizida tashxis qo'yilgan. Smearlarning sitologik tahlili surunkali proliferativ yallig'lanish belgilarini

aniqladi: kirpikli epiteliyning deskuamatsiyasi, stratifikatsiyalangan skuamoz epiteliyga metaplaziya va aniq to'qima infiltratsiyasi.

Morfologik o'zgarishlar mahalliy hujayra immunitetida chuqur nomutanosiblik fonida sodir bo'ldi. Bronxitli bolalarda faringeal shilliq qavatning limfoid infiltratsiyasida teskari T-limfotsitlar nisbati kuzatildi: mahalliy T-yordamchi hujayralar (CD4+) yetishmasligi va sitotoksik T hujayralarining (CD8+) haddan tashqari migratsiyasi. Yallig'lanish joyidagi CD4+/CD8+ nisbati $0,9 \pm 0,08$ gacha tushirildi (nazorat guruhida $1,5 \pm 0,12$; $p < 0,05$). Bronxitli bolalarning og'iz suyuqligidagi neytrofil fagotsitik faolligi bostirildi: fagotsitlar soni sog'lom bolalarga nisbatan 35% ga kamaydi, bu esa to'liq bo'lmagan fagotsitoz va patogenning turg'unligini ko'rsatadi.

XULOSA

Shunday qilib, yuqori nafas olish kasalliklari mahalliy hujayra immunitetidagi nuqson - fagotsitozning bostirilishi va orofarenksdagi mahalliy CD4+/CD8+ limfotsitlar nisbatidagi nomutanosiblik bilan saqlanib qoladi. Mahalliy hujayra nazoratining surunkali yetishmovchiligi limfoid to'qimalarning kompensator giperplaziyasiga va faringeal epiteliyning metaplaziyasiga olib keladi, shilliq qavatni himoya to'sig'idan infeksiya rezervuariga aylantiradi. Tez tez kasal bo'ladigan bolalar uchun terapevtik dasturlar mahalliy sanitariya va orofarenksning mahalliy immunokorreksiya usullarini o'z ichiga olishi kerak.

ADABIYOTLAR RO'YXATI

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