Objectives: Improving the efficacy of diagnostics of mycotic lesion of upper respiratory tracts and ears at an early age.

Conclusions: Rapid diagnostic test of mycotic lesion of ENT organs at an early age allowed to shorten the period between encountering a patient and assigning etiotropic treatment from 10 – 14 days to one day. Its advantages include simplicity, immediacy, low cost, good specificity and the absence of false-positive results.

Methods: Rapid diagnostic test for mycotic lesion of upper respiratory tracts and ears includes fluorescence microscopy of the drugs following their staining with Calcofluor White. 568 children with suspected mycotic lesion of upper respiratory tracts and ears were examined, including 343 children with exacerbated chronic adenoiditis (1st group), 97 children with exacerbated chronic tonsillitis (2nd group) and 128 children with external otitis (3rd group).

Results: Micromycetes were diagnosed in 64 (18.6 %) cases in the 1st group. Species composition of the Candida fungus was as follows: C. albicans: 26 cases (40.6 %), C. tropicalis: 11 cases (17.1 %), C. famata: 3 cases (4.6 %), C. guilliermondia: 1 case (1.5 %), C. pseudotropicalis: 1 case (1.5 %), Candida spp.: 22 cases (34.6 %).

Micromycetes were diagnosed in 15 (15.5 %) cases in the 2nd group as follows: C. albicans: 8 cases (53.3 %), C. famata: 1 case (6.7 %), C. guilliermondia: 1 case (6.7 %), C. pseudotropicalis: 1 case (6.7 %), Candida spp.: 4 cases (26.6 %).

Micromycetes were diagnosed in 27 (21.1 %) cases in the 3rd group as follows. Aspergillus fungus: 17 (62.9 %) patients, including Aspergillus niger (14) and Aspergillus fumigatus (3). Candida fungus: 10 (37.1 %) patients, including Candida albicans (5) (50%), Candida tropicalis (3) (30%) and other Candida species (2) (20%).

Conclusions: Rapid diagnostic test of mycotic lesion of ENT organs at an early age allowed to shorten the period between encountering a patient and assigning etiotropic treatment from 10 – 14 days to one day. Its advantages include simplicity, immediacy, low cost, good specificity and the absence of false-positive results.