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**Paper Poster Session**

**Antifungal drug treatment**

**Treatment of recurrent esophageal candidiasis (rec) in hiv-negative patients in Saint Petersburg, Russia**

Nikolay Klimko\*<sup>1</sup>, Julia Melekhina<sup>2</sup>, Michael Shevyakov<sup>3</sup>, Yuri Avdeenko<sup>3</sup>, Ekaterina Frolova<sup>4</sup>, Tatyana Bogomolova<sup>5</sup>, Irina Vybornova<sup>6</sup>, Natalya Vasilyeva<sup>6</sup>

<sup>1</sup>*North-Western State Medical University Named after I.I. Mechnikov, Kashkin Research Institute of Medical Mycology, Dept. of Clinical Mycology, St-Petersburg, Russian Federation*

<sup>2</sup>*North-Western State Medical University Named after I.I. Mechnikov, Clinical Mycology, Allergology and Immunology, Saint-Petersburg, Russian Federation*

<sup>3</sup>*North-Western State Medical University Named after I.I. Mechnikov, Saint-Petersburg, Russian Federation*

<sup>4</sup>*North-Western State Medical University Named after I.I. Mechnikov, Kashkin Research Institute of Medical Mycology, St. Petersburg, Russian Federation*

<sup>5</sup>*North-Western State Medical University Named after I.I. Mechnikov, Dept. of Clinical Mycology, Kashkin Research Institute of Medical Mycology, St. Petersburg, Russian Federation*

<sup>6</sup>*North-Western State Medical University Named after I.I. Mechnikov, Kashkin Research Institute of Medical Mycology, Saint-Petersburg, Russian Federation*

**Background:** The problem of a recurrent esophageal candidiasis (REC) is not studied enough. Risk factors and the efficiency of maintenance antifungal therapy of REC in HIV-negative patients are not well established.

**Material/methods:** In prospective single-center study (2004-2014) we include 124 HIV-negative patients with REC. Median age was 53 y (46-65), women 91. Endoscopic examination with a biopsy, microscopy and culture was made in all patients. Identification of the pathogen was made with MALDI-TOF Mass Spectrometry. Determination of susceptibility of pathogens to fluconazole and voriconazole was made with the disco-diffusion CLSI M44-A method. A criterion of RCE was  $\geq 1$  relapse in a year.

**Results:** Individual risk factors for fungal infection were: thyroid disease (OR= 2,8; 95% CI, 1,5-5,2); hypothyroidism (OR= 4,8; 95% CI, 1,4-16); diabetes mellitus (OR = 1,1; 95% CI, 0,4-2,8); bronchial asthma (OR= 1,2; 95% CI, 0,5-2,9); use of inhaled corticosteroids (OR = 4,22; 95% CI, 0,5-2,9); treatment with broad-spectrum antibiotics (OR = 1,8; 95% CI, 0,4-8,7). Other independent predictors of esophageal candidiasis were smoking and the consumption of very hot food. The clinical signs were dysphagia (90%), retrosternal discomfort (50%), and odinophagia (18%). Endoscopic features were hyperemia (100%) and contact sensitivity (100%) of esophagus mucosa, and white fibrin plaques (75%). Main etiology agent was *C. albicans* (99%), sensitive in vitro to fluconazole and voriconazole (100%). Treatment of relapse fluconazole 150 mg/day for 3-4 weeks was effective in 100% patients. Maintenance antifungal therapy – 150 mg fluconazole once a week for 6 months. If patients did not receive maintenance therapy rate of relapse in 6 months was 57%. All patients with maintenance

therapy were in remission of REC in 6 months ( $p < 0,005$ ). No side effects or drug-drug interactions in patients with maintenance antifungal therapy were detected.

**Conclusions:** *Candida albicans* predominated in 99%. Risk factors for fungal infection included thyroid disease, hypothyroidism, diabetes mellitus, bronchial asthma, previous use of inhaled corticosteroids, broad-spectrum antibiotics, smoking and the use of very hot food. Maintenance antifungal therapy with 150 mg fluconazole once a week for 6 months is effective and safe in HIV-negative patients with recurrent esophageal candidiasis.