INTRODUCTION

Candida albicans is one such microorganism, which is normally found as a commensal on host epithelial surfaces, colonizing more than 50% of individuals. C. albicans is a commensal organism found on the human mucosal surface and is generally harmless in healthy individuals.

In healthy individuals this colonization generally remains benign. However, mildly immunocompromised individuals can frequently suffer from recalcitrant infections of the oral cavity. These oral infections with Candida spp. are termed "oral candidiasis" (OC). Such infections are predominantly caused by C. albicans and can affect the oropharynx and/or the esophagus of persons with dysfunctions of the adaptive immune system.

Nowadays, a large variety of Candida spp. identification methods are available, and they differ in principles, discrimination power, and costs. Traditional microbiological procedures are based on macroscopic and microscopic analysis of colonies and cells presumptive tests. Serological tests: Tests like enzyme linked immunosorbent assay (ELISA) and radio immuno assay (RIA) for detection of candidal antigen, either cell-wall mannan or cytoplasmic constituents are available.

Molecular methods: In previous studies, we have found that multiplex PCR is an accurate, rather inexpensive, and easy to perform techniques for identification of C. albicans and some other species.

METHODS AND MATERIALS

In our study we have analyzed 1317 people, in the Microbiology Laboratory of DRSH, Durrës, Albania, suspected for C. albicans throat infections. Individuals we analysed were females and males, of different age groups, for the period of time between April 2012 and December 2013.

First we got the throat samples from patients who came in the laboratory. After we got the samples, we analysed them, to detect if they are positive to C. albicans throat infections or not. The method we used is the traditional microbiological procedure, which is based on morphology criteria for identification C. albicans. We inoculated the samples into Sabouraud's Dextrose Agar media (SDA). We use SDA media because it allows the growth of Candida and inhibits the growth of commensial oral bacteria.

The sample was streaked using inoculating loop and incubated at 37°C for 48 hours. Identification of C. albicans is made by examination in microscope. The growth appeared in 48 hours as cream/white colored, smooth and pasty colonies.

For statistical processing of the results we used MegaStat statistical program.

RESULTS AND DISCUSSION

A total of 1317 individuals suspect for C. albicans throat infections were analysed in our study. The yeast isolates were received from the Microbiology Laboratory of DRSH, Durrës, Albania. The samples were taken from patients of different sex types, of different age groups, and in different seasons, in the period of time between April 2012 to December 2013.

945 (72%) out of 1317 analysed samples were negative and 372 (28%) were positive. From 338 samples taken in summer, 243 (72%) were negative and 95 (28%) were positive. From 382 samples taken in autumn, 268 (70%) were negative and 114 (30%) were positive. From 227 samples taken in winter, 166 (73%) were negative and 61 (27%) were positive. From 464 samples taken from patients 1-15 years old, 376 (81%) were negative and 88 (19%) were positive. From 227 samples taken from patients 16-30 years old, 184 (81%) were negative and 43 (19%) were positive. From 136 samples taken from patients 31-45 years old, 99 (73%) were negative and 37 (27%) were positive. From 172 samples taken from patients 46-60 years old, 102 (59%) were negative and 70 (41%) were positive. From 267 samples taken from 61-75 years old, 158 (59%) were negative and 109 (41%) were positive. From 51 samples taken from 76-90 years old, 26 (51%) were negative and 25 (49%) were positive.

CONCLUSIONS

In our study resulted that women are more affected by C. albicans throat infections than men. C. albicans throat infections are more widespread in autumn, 31%, and less in winter, 16% (p<0.05). The age group most effected by C. albicans throat infections is 7-15 years old and the less one is 1-15 years old, but p<0.05. This is probably because the number of samples belonging to the age group 76-90 years in our study is too small to matter, only 3.8% of the total number of samples. If this age group do not consider therefore that highlighted, then in our study the age group most affected by C. albicans is the one over 46 years old. (p<0.05)

REFERENCES

1. Brown GD, Denning DW, Gore NA, Netea MG, White T, Liguori G, Lucariello A, Colella G, et al. RapidEmail: Aleksandër Moisiu University, Professional Studies Faculty, Aleksandër Moisiu University, Durrës, Albania...