

APPENDIX

Papers accepted -

- 1) Studies On Airspora Of General Hospital Satara, (Ms).-Bioinfolet, 2008. vol. 5
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- 2) Airspora Of Museum Of Murals And Paintings In Satara Dist. (M.S.).- Bioinfolet.

STUDIES ON AIRSPORA OF GENERAL HOSPITAL SATARA, (M.S.).

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ABSTRACT

The present paper deals with the study of airspora of general hospital Satara, from September 2006 upto March 2007 to screen out the probable pathogenic fungi present and their relation with the patients of skin and other diseases in hospital. The occurrence of airborne fungal spores showed peak period in the month of September. During this period various skin diseased patients were recorded in the hospital.

Key words : Aeromycoflora, Mycoses.

Near about 100 or more species of fungi are generally recognized as infectious pathogens to human beings. Most of them cause systemic, lymphatic and subcutaneous mycoses etc. Various groups of people visit the hospital. Some of them suffer from skin and other diseases viz. aspergillosis, blastomycosis, candidiasis, cladosporiosis, mucormycosis, mycotic keratitis, penicilliosis, mycetoma or other mycoses. The present investigation was undertaken to study the relation between fungal airspora and diseased patients in the hospital during Sept. 2006 to March 2007.

The aeromycological study was carried out weekly from September 2006 to March 2007. Two methods were used for studying airspora of general hospital, one by using gravity petri dish method and other by Tilak Rotorod sampler (Tilak *et. al.* 1972) method. The semipermanent slides were prepared by staining with 1% cotton blue in lactophenol and were sealed with DPX and wax as sealant. Fungal cultures were prepared and identified with help of recent and upto date literature. (Tilak, 1987). The semipermanent slides were deposited in M.H.B.D. Y.C.I.S. Satara, 415 001 (M.S.).

Nobel and Clayton, (1963), carried out the aerobiological survey of hospital wards by using

silt sampler. Campbell (1974) studied actinomycoses, nocardiopsis, blastomycosis, candidiasis, *occidinioidomyensis*, cryptococcosis, histoplasmosis and other mycoses and the airspora of hospital. Hammerman, *et. al.* (1974), reported primary and secondary mycoses infections in hospital patients. Talib *et. al.* (1980) and Tiak *et. al.* (1982) carried out survey of allergenic fungal spores inside the hospital wards. Patil, (1986), studied mycoflora of hospital.

During present investigation, the indoor and outdoor airspora study indicated the presence of about 30 types of mycopolutants, belonging to various fungal groups (Table 1). The dominant were *Cladosporium* (60.82%), *Aspergillus* (15.40%), *Penicillium* (3.48%), *Fusarium* (2.04%), *Rhizopus* (1.65%), *Nigrospora* (1.60%) and *Mucor* (0.9%).

The date of the patients treated per month showed no correlation with number of mycopolutants present in and outside the hospital during study period.

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Table 1 Percent incidence of various fungi in Indoor and Outdoor hospital mycoflora.

Sr. No	Mycopollutants	Indoor hospital mycoflora (%)	Outdoor hospital mycoflora (%)
	Ascomycotina		
1	<i>Aspergillus</i>	16.82	12.43
2	<i>Chaetophoma</i>	0.04	0.08
	Zygomycotina		
1	<i>Mucor</i>	0.66	1.45
2	<i>Rhizopus</i>	0.38	1.61
	Deuteromycotina		
1.	<i>Alternaria</i>	3.92	4.04
2.	<i>Ampullifera</i>	0.38	0.40
3.	<i>Acremonium</i>	0.04	0.32
4.	<i>Blastomyces</i>	0.50	0.64
5.	<i>Candida</i>	0.19	0.08
6.	<i>Ceratocystis</i>	0.07	0.08
7.	<i>Chrysosporium</i>	0.35	0.48
8.	<i>Cleidosporeum</i>	59.36	61.38
9.	<i>Coniosporium</i>	0.04	0.08
10.	<i>Curvularia</i>	2.29	2.26
11.	<i>Drechslera</i>	0.46	0.56
12.	<i>Fulvia</i>	0.12	-
13.	<i>Fusarium</i>	1.51	3.15
14.	<i>Humicola</i>	0.35	0.80
15.	<i>Monimonella</i>	0.07	-
16.	<i>Nigrospora</i>	1.51	1.77
17.	<i>Oidium</i>	0.07	0.08
18.	<i>Penicillium</i>	4.77	0.80
19.	<i>Periconia</i>	0.52	0.80
20.	<i>Pithomyces</i>	0.23	0.08
21.	<i>Scytalidium</i>	0.07	-
22.	<i>Trichopyton</i>	0.19	0.16
23.	<i>Trimmatoatromae</i>	0.15	0.64
24.	<i>Utrula</i>	0.74	1.13
25.	<i>Urocladium</i>	0.38	0.24
26.	<i>Verrucillium</i>	-	0.24
27.	Myc. With Chlamydoconidia	0.97	2.66
28.	Sterile Myc.	1.01	1.45

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