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Coincidental Detection of Polymicrobial Growth in the Environment of an Outpatient Department of Ophthalmology

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Dear Editor,

In the Ophthalmology outpatient department (OPD) of a tertiary hospital of east India, it is routine practice to inoculate culture plates and test tubes for bacterial and fungal culture following scraping of corneal ulcers of suspected microbial origin[1]. A fresh plate of chocolate agar and an inoculated test tube containing Sabouraud's dextrose agar were inadvertently left on the work desk of the ophthalmologist's room after this procedure.

After 48 hours of resting undisturbed, and despite the air conditioning running continuously, florid growth was noted on the agar plate with varying morphology of the microbial colonies (Figure 1A). Colonies with black center and white margins were noted near the top of the agar slope in the test tube (Figure IB, red arrow), which were characterized as *Aspergillus niger*, consistent with the growth noted on the rest of the scrapings from the patient concerned.

Our findings suggested polymicrobial inoculation of the agar plate from the environment of the OPD. This is a high-volume OPD with over 300 patients and their accompanying persons arriving each day for consultation. The hospital is located approximately 2.1° of latitude north of the Tropic of Cancer, and the air conditioning is maintained for most of the time[2]. Footwear is not removed, and facemasks are not worn by most of the patients while interacting with the ophthalmologist[3]. Routine cleaning of table tops is accomplished by chlorhexidine-based disinfecting agents, while the floor is mopped daily by phenolic solutions. Healthcare workers are trained in infection control procedures and usually follow institutional guidelines. From the florid growth thus observed, it is apparent that these measures are insufficient in preventing airborne microbes from thriving[4].

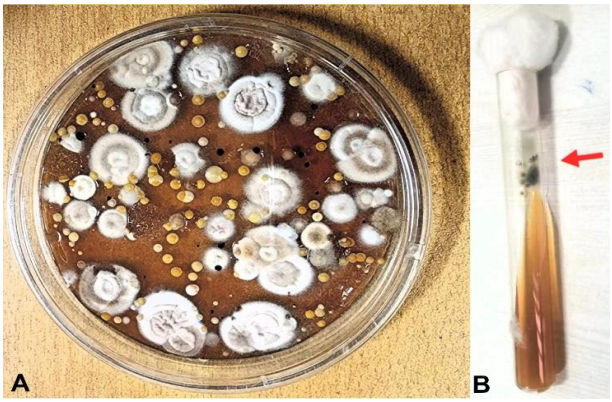

Figure I: A. Polymicrobial growth on the chocolate agar plate, B. *Aspergillus niger* colonies on agar slope (red arrow)

Our findings are a reminder to all healthcare workers that continuous and complete implementation of infection control measures, including hand hygiene, biomedical waste disposal and disinfection, is necessary to ensure a healthy hospital environment, as is periodic audit of the microbiological profile of different hospital zones as well as reinforcement of the training to staff.[5]

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