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Short Communication

Antibiotics and their Impact on Fungal Disease

Abhishek Singh*

Department of Bioengineering, Florida Gulf Coast University, FL, USA

DESCRIPTION

Mycosis, sometimes referred to as a fungus infection, is a condition brought on by fungi. Different forms are generally categorised into superficial, subcutaneous, and systemic categories based on the area of the body afflicted. Common tinea of the skin, including tinea of the body, groyne, hands, feet, and beard, as well as yeast infections like pityriasis versicolor, are examples of superficial fungal diseases. Eumycetoma and chromoblastomycosis are two subcutaneous forms that typically affect the tissues in and beneath the skin. The more serious systemic fungi infections are aspergillosis, mucormycosis, pneumocystis pneumonia, cryptococcosis, and histoplasmosis [1]. With superficial infection, a rash is typically present. A lump and skin changes can indicate a fungus infection within or beneath the skin. Symptoms of meningitis or pneumonia-like symptoms could appear with a deeper or there are fungi everywhere around us, but not all of them cause disease. After spores are inhaled, come into contact with skin, or enter the body through the skin, such as a cut, wound, or injection, fungal infection takes place. People with weakened immune systems are more likely to experience it. This includes those who are ill with diseases like HIV/AIDS and those who are taking medications like steroids or cancer therapies. Yeasts, moulds, and fungi that can exist as both a mould and yeast are among the fungi that can infect people. The fungus *Candida albicans* is able to produce both superficial, minor candidiasis in healthy individuals, such as oral thrush or vaginal yeast infection, and severe systemic candidiasis [2]. It can also reside inside of people without causing any symptoms. In general, a diagnosis is made using signs and symptoms, microscopy, culture, occasionally a biopsy, and with the help of medical imaging.

Certain superficial fungal skin infections can resemble other skin disorders including eczema and lichen planus. Antifungal medications are typically used for treatment, typically in the form of a cream, pill, or injection, depending on the type and severity of the infection. Some demand for the surgical removal of contaminated tissue [3]. More than one billion people worldwide suffer from fungus infections each year, which are widespread and prevalent. In 2020, it was anticipated that 1.7 million deaths due to fungi were occurring. Numerous diseases, such as mycetoma, chromoblastomycosis, and sporotrichosis, are ignored. Other animals can develop a variety of fungal illnesses, some of which can be transferred from animals to people. Mycoses are typically categorised as superficial, subcutaneous, or systemic, depending on how deep and broad the infection is and whether it affects internal organs. They can have an impact on the mouth, skin, nails, and vagina. Blastomycosis, cryptococcus, coccidioidomycosis, and histoplasmosis are a few examples of several forms that afflict people who reside in or travel to specific regions of the world. Others tend to affect those who are unable to resist infection, such as aspergillosis, pneumocystis pneumonia, candidiasis, mucormycosis, and talaromycosis [4]. Mycoses may not always fall neatly into one of the three categories: superficial, subcutaneous, or systemic. In persons with impaired immune systems, some superficial fungal infections can lead to systemic illnesses. Some subcutaneous fungal infections have the potential to spread to deeper structures and cause systemic illness. In addition to causing both mild candidiasis in healthy individuals and severe invasive candidiasis in those unable to fight infection on their own, *Candida albicans* can exist in humans without causing symptoms. Some fungi, including yeasts, moulds, and some that can both be moulds and yeasts. Spores are present everywhere, and infection results from inhalation, skin contact, or skin-to-body contact, such as through a cut, wound, or injection [5]. The most frequent fungus that infects people is *Candida albicans*, especially when it manifests as oral or vaginal thrush and frequently happens after taking antibiotics. People with weakened immune systems are more susceptible to develop fungal infections. This includes those who are ill with diseases like HIV/AIDS and those who are taking medications like steroids or cancer therapies. Diabetes patients are more likely to contract fungus infections. Extremely vulnerable groups include the young and aged. Antibiotic-treated patients are more likely to get fungus infections. Children with compromised immune systems, such as those who have cancer, are more susceptible to invasive fungal infections.

Correspondence to: Abhishek Singh, Department of Bioengineering, Florida Gulf Coast University, FL, USA, E-mail: abhisheksh@gmail.com

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