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INTRODUCTION

Pulmonary aspergillosis can cause an allergic reaction by fungi belonging to the family of aspergillus.

There are more than 150 species in *Aspergillus* genus. *Aspergillus fumigatus* is the most frequently detected microorganism in the diagnosis of chronic pulmonary aspergillosis. *A. niger*, *A. flavus*, *A. terreus*, and *A. nidulans* have also been sampled in pulmonary aspergillosis cases.

Aspergillus fumigatus is a saprophytic, air-dispersed fungus with filaments, whose natural habitat is soil (Figure 1). For its development, moisture, organic substances and warmth are required. It can be found in rotting leaves and floor coverings such as carpet. The conidia, which can roam freely in the air, can easily reach the alveoli as they are 2-3 µm in size. From building areas undergoing restoration, demolition or new constructions, high concentrations of spores are released into the air [1]. Less well known sources of aspergillus are spices that are not dried under ideal conditions, spices that are subsequently moistened, agricultural products, dried nuts and illegal drugs taken by inhalation. *Aspergillus* can be found in transplantation and medical oncology clinics, intensive care units, operating theaters and in all areas where ventilation systems are inadequate, especially in household garbage collection areas.

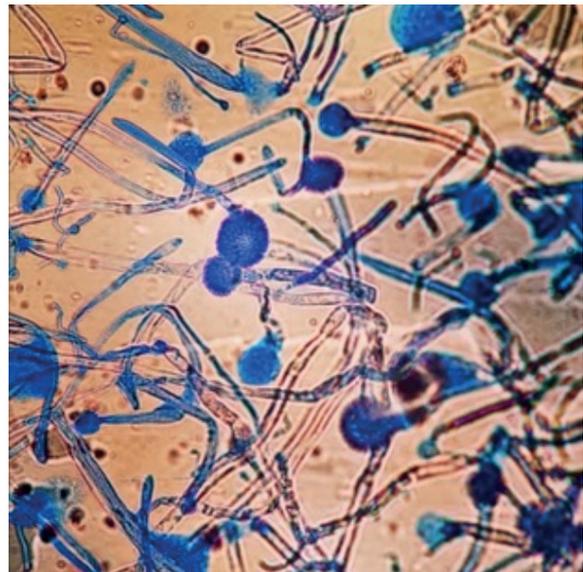


Figure 1. *Aspergillus fumigatus*, microscopic view. (Selcuk University, Faculty of Medicine Archive)

As a result of saprophytic colonization of the cavities within the pre-existing lung parenchyma, they may cause “fungus ball” formation and cause pulmonary aspergilloma.

CLINICAL PATHOPHYSIOLOGY

The variety of clinical situations associated with aspergillosis may vary from allergic reactions, infections in the form of asymptomatic colonization, superficial infection and acute or suba-

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