

Título: FILAMENTOUS FUNGI DETECTED ON SURFACES OF FORMALIN FIXED ANATOMY CADAVERS

Autores Bonifacio, T.T.C.¹, Morais, B.T.¹, Rique, A.S.¹, Pereira, A.K.F.T.C.¹, Tomaz-Morais, J.F.¹, Sousa, A.C.B.¹

Instituição UFPB - Universidade Federal da Paraíba (Cidade Universitária, Castelo Branco, 58051-900, João Pessoa - PB)

Resumo:

Anatomic dissection of human cadavers is an invaluable teaching tool utilized by anatomists and medical educators. The cadavers used in this study were embalmed following standard embalming practices. The procedure included tissue perfusion with a 10% formalin solution via a left femoral artery cannula, and also submersion in the same solution for six months. From the fixation, you can maintain the shape of the anatomical parts and conservation for a long period, but one of the problems that face anatomists is the growth of fungi on cadavers. From these considerations, this study aims to isolate and identify filamentous fungi found in the Human Anatomy Laboratory, where the proliferation of the same is visible in anatomical parts preserved in formaldehyde solution, aimed at preventing possible opportunistic fungal diseases. The fungi were collected from anatomical parts that showed visible signs of fungal contamination with the help of sterile swabs. Then, the plates were sealed and kept at room temperature for growth, and subsequently isolating the different fungal colonies. The identification of the fungal isolates was accomplished through macro and micromorphology. Four fungal genera were identified: *Aspergillus* sp. - colonies developed after 2 to 3 days, some of them were lemon green (*Aspergillus fumigatus*), others were black (*Aspergillus niger*). Colonies were rounded or irregular with growing white edge. Microscopically, hyphae were septate and branched. Phialides formed on top of swollen vesicles at the end of a long conidiophores; *Penicillium* sp. - developed readily (2-3 days). Colonies were bluish green with whitish growing edge. Under the microscope, chains of conidia were produced by phialides, which were supported by branched conidiophores; *Trichophyton* sp - Colonies developed after 10 days. Microscopically there were irregular conidial chains. *Acremonium* sp - Colonies presented slow-growing. The hyphae were fine and hyaline, and produced simple phialides. The conidia were one-celled and aggregated in slimy heads at the apex of each phialide. The results indicate that cadavers processed with 10% formalin have viable organisms on their surfaces that can be a source of contamination of laboratory equipment, environment and professionals who manipulate these pieces as a working tool and study. This study underscores the importance of infection control protocols and highlights the need the use of biosafety standards.

Palavras-chave: contamination, medical science education, anatomical parts