

## LETTER TO THE EDITOR

### ANALOGIES IN MEDICINE: FUNGUS AND LITURGY

September 16, 2010

Dear Sir

In 1665, Robert Hooke published *Micrographia*, with the first microscopic illustration of a fungus. In 1729, Pietro Antonio Michele, a priest and biologist from Florence, introduced the term *aspergillus* to refer to a fungus, whose conidiophore (a special stalk or branch of the mycelium, bearing conidia) was similar in shape to an *aspergillum* (or *aspersorium*)<sup>1,4</sup>. Michele made use of an analogy to name the fungus<sup>3</sup>.

The *aspersorium* (or *aspergillum*) is a metal or wooden instrument used in liturgical ceremonies. It is a thin wooden rod with a brush at one end, or a metal rod that ends in a sphere full of little holes used in religious rituals to sprinkle holy water. It is said that a young erudite in the hinterland of Minas Gerais State left the church saying that he had been receiving the priest's hyssop; to his despair, his macho's posture was put under suspicion by the shy and embarrassed parishioners who ignored the meaning of the word hyssop. Hyssop is used to fill the *aspergillum*, which the priest dips into a bowl of holy water, and sprinkles onto the congregation to bless them. It is also with hyssop that the blood of a bird offered in sacrifice is to be sprinkled for the cleansing of a man or a house affected with leprosy (Leviticus 14:4-7)<sup>2</sup>.

Some fungi of the genus *Aspergillus* are pathogenic (*A. fumigatus*, *A. flavus* and *A. niger*), and may provoke pneumonia, sinusitis, arteritis, ceratitis, endocarditis and lesions in the central nervous system, specially in immunosuppressed patients. They may also produce the carcinogenic aflatoxin, resulting in food contamination, responsible in part for hepatocellular carcinoma incidence.

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