women included. While the mean CD4 count of CTAg-sera-positive patients was significantly lower than that of negative patients (p < 0.05), the median viral load between the two patient groups was approximately similar (p = 0.65). Only four CMV samples were positive in culture for Cryptosporidium spp. and were all characterized as C. hominis/C. parvum/variety A.

AR/LH stage, two isolates have been identified using the D1/D2R-FLP/1.8 kb MLST scheme and two different sequence types (ST) profiles were identified, namely ST59 and ST63. While ST59 is the main Cryptosporidium hominis described in Congolese (DR) PBV with CMV, ST63 has not yet been identified in the DR before. Of note, epidemiological and clinical characteristics of ST63 have so far been poorly characterized in the literature. Susceptibility testing against the major antimicrobials and the MLST typing of the two remaining strains are still ongoing.

Conclusions: The prevalence of cryptosporidiosis should not be neglected among asymptomatic PLHIV in the DRC, in meaning that screening and preventive treatment measures should be integrated into the national policy for HIV management and related diseases. For the rest of the analyses still in progress, conclusions can only be drawn once they have been fully finalized.

PM02
Spread of Sporothrix brasiliensis from the sneeze of infected cats: a potential novel route of transmission
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Objectives: Cat-transmitted sporotrichosis (CTS), caused by Sporothrix brasiliensis, is an emerging fungal disease that has become a major public health concern in Brazil. Transmission of CTS usually occurs through the inhalation (e.g., sneezing or biting) of infectious yeast from feline Sporothrix lesions. Recent reports on transmission events have suggested that S. brasiliensis might be transmitted through feline respiratory droplets created while sneezing. The aim of our study is to determine whether infectious respiratory secretions are expelled when cats with sporotrichosis sneeze.

Methods: We collected respiratory secretions expelled while sneezing from 25 cats diagnosed with sporotrichosis. We placed a Mycobacterium plate, a fungal culture medium, in front of the animals’ nostrils and used a nasal swab to stimulate sneezing (Fig. 1). Samples were incubated at 28-30°C for 4 weeks in the Mycology Laboratory of Hospital da Clínicas. Molecular identification of the isolates was performed by sequencing the calmodulin gene. The infected cats enrolled in the study were subsequently reared at the School Veterinary Clinic of the Pontifical Catholic University of Parana, a referral hospital for the treatment of feline sporotrichosis.

Results: One of the 25 sporotrichosis samples collected, 20 (79%) had evidence of fungal growth morphologically consistent with Sporothrix. Sequencing of all isolates identified Sporothrix brasiliensis (Fig. 2).

Conclusions: We identified a possible novel route of transmission of Sporothrix spp. through infectious feline respiratory secretions expelled during sneezing. The respiratory droplets created by a sneeze could contain viable Sporothrix yeast that could infect humans and other animals after mucosal exposure. One health partner and collaborator such as veterinarians, physicians, health authorities, epidemiologists, and fungal disease researchers should be made aware of the potential spread of Sporothrix through respiratory droplets and ensuring to prevent and control the further spread of CTS. To prevent cat-to-human transmission of Sporothrix brasiliensis, personal protective equipment (PPE) should be worn while handling a cat with suspected sporotrichosis. Veterinarians, veterinary clinic employees, students, and pet shop owners are at increased risk due to their professions. Veterinary care frequently involves procedures that encourage respiratory droplets (e.g., nasal ointments), contact other close contact may directly expose staff to infectious secretions. Because this study identified viable yeast in respiratory droplets from sneezing, decontamination and disinfection of exposed surfaces is increasingly important, as surfaces and objects can serve as fomites for Sporothrix. Physicians who diagnose and treat human cases of sporotrichosis should be aware of this new transmission method to improve clinical suspicion, diagnosis, and treatment for sporotrichosis. Approximately half of the human patients with conjunctival sporotrichosis did not report experiencing traumatic injury from cats; mucosal exposure to infectious yeast is a likely alternative transmission method.
Toxicological evaluation of *Aureobasidium pullulans* var. *pullulans* induced mycotoxicosis in amine model

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Objectives: The genus *Aureobasidium* includes 14 species, amongst which *Aureobasidium pullulans* is the most well-known species. *Aureobasidium pullulans*, includes two well-documented varieties found in indoor environments and associated with health issues. *A. pullulans* var. *pullulans* and *A. pullulans* var. *urodicum*. *Aureobasidium pullulans* is a mold belonging to the family Dothideaceae. It colonizes nails, hair, and skin in humans. Differential immune reactions may occur in humans, like hypersensitivity pneumonitis and allergic. Respiratory allergies may result due to high levels of *Aureobasidium* in the air. The metabolites of this mold, like mycotoxins, are known to cause toxic-irritant effects. In view of this, the present work evaluates the effects of the toxic secondary metabolites of *A. pullulans* var. *pullulans* (CBS 777.93) in a mouse model.

Methods: To assess the toxic effects of the *A. pullulans* mycotoxin, eight organs, namely, brain, lungs, kidney, spleen, stomach, heart, liver, and testes, were taken into consideration. The hematological, histopathological, and biochemical aspects of *A. pullulans*-induced mycotoxicosis were investigated.

Results:

- Behavioral observations—A significant decrease in the consumption of food in both IN and IP groups was noted.
- Anatomical observations—Gross lesions in the liver and lungs, and the presence of cysts or polypos was noted on autopsy in both groups. Likewise, relative organ-body weight percentage also increased in all the organs except the testis.
- Hematological analysis—Leukopenia and neutropenia were observed in IP as well as IN groups.
- Biochemical analysis—Electrophoresis of microsomal (MDX), reduced cytochrome (CAT) and superoxide dismutase (SOD) producing, abnormal levels of aspartate transaminase (AST) and alanine transaminase (ALT) were observed, which signifies *A. pullulans* mycotoxin induced oxidative stress.
- Histological observations—Histopathological changes characterized by inflammation and necrosis in the liver, edema in the lungs, tubular hypertrophy in renal tubules, angiospasm in the spleen, hyperplasia in gastric tissues, neurodevelopmental anomaly in the brain, and degeneration in the testes were observed.
- Cell apoptosis factor—The reduced activity of caspase-3 enzyme was noted in both the mycotoxicosis-induced groups.

Conclusion: Thus, from the present study, we concluded that mycotoxins isolated from *A. pullulans* (CBS 777.93) demonstrated toxicity in all eight organs, with the testis and lungs being the worst-affected organs. Even at a very small concentration and short exposure, the mycotoxins caused severe damage to the vital organs. New risk assessment approaches should be considered to investigate the toxicological interactions of *A. pullulans* mycotoxins in the indoor environment and in animal models.