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## CASPOFUNGIN HEPATOTOXICITY AND CLINICAL EXPERIENCE IN AN ORGAN TRANSPLANT POPULATION

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**Objectives:** 1) To assess caspofungin hepatotoxicity with concomitant use of immunomodulating therapy in an immunosuppressed population. 2) To retrospectively evaluate clinical evolution of fungal infections in these patients with caspofungin used as unique or part of the treatment.

**Methods:** We reviewed files of patients who received caspofungin therapy for fungal infection. Cases were detected from pharmacy electronic files. Liver blood test, medication, physician diagnosis and investigation were noted. Also, radiological, bacteriological and clinical evolution were analysed.

**Results:** A total of 19 episodes of caspofungin use on 17 patients were documented. 4 episodes in 4 patients were excluded by lack of biochemical data. In 13/15 episodes, patient received caspofungin for more than 7 days. Mean age was 42.6 years old. Among all patients, 12 had received lung transplant, one had received pancreas transplant and one suffered of aplastic anemia. Tacrolimus was used as part of immunomodulating therapy in 9 (60%) and cyclosporine in 6 (40%) episodes. Reason for the use of caspofungin was: documented pulmonary aspergillosis in 11 (73.3%) cases, suspected aspergillosis infection in 1 (6.6%), catheter related candidemia in 2 (13.3%) and *Scedosporium apiospermum* infections in 1 (6.6%). Median duration of treatment with caspofungin was 20.0 days (+/-29.8). Among all episodes, 2 cases of hepatotoxicity have been detected during use of caspofungin, but other medication could also have been incriminated in these episodes. In one, AST increased with quinolones ad twice upper normal level few days before simultaneous introduction of caspofungin, amphotericin B, azithromycin and  $\beta$ -lactam antibiotics. The other case of toxicity was seen by a elevated GGT in a patient treated also by voriconazole. In those patients with suspected toxicity, one was receiving tacrolimus, and one cyclosporine. In two cases, amelioration of pre-existing elevated liver enzymes was seen even if patient have been started on caspofungin. In the last 11 episodes, no adverse event was observed. In the 12 patients who had been treated for more than 7 days with caspofungin, 9 evolved well, 1 died of disseminated aspergillosis et 2 died of his underlying disease.

**Conclusion:** In our population, caspofungin was well tolerated and we did not observed premature cessation for adverse event. This new antifungal represented a real advance in our therapeutic arsenal, particularly for his efficacy and toxicity profile.