

## Evaluation of Adequacy of Caspofungin Prescription in a Tunisian Hospital Cohort

**Authors :** Mariem Meddeb Sidhom, Souhayel Hedfi, Rjaibia Houda, Mehdi Dridi, Mohamed Ali Yousfi, Sâadia Gargouri

**Abstract :** Considering the important increase in costs of caspofungin treatments and ahead the evolution of its indication, pharmacy department was prompted to realize a review of the adequacy of prescriptions in the medical intensive care units (ICU). A retrospective observational study was conducted in Tunis military hospital concerning ICU prescriptions of caspofungin from 2008 until 2013. A pharmacist had returned to the patient's medical records to collect data and to the microbiology department for parasitological results. The adequacy of prescriptions was evaluated by a pharmacist and an infectiologist parasitologist, referring to predefined scale of criteria resuming the indications of the marketing authorization (MA) and grade AI-AII of the guidelines of the Infectious Diseases Society of America (IDSA). Sixty two ICU patients have been treated with caspofungin during the period of study; however, 8 files were lost. Thus, 54 patients were included in the study having received 55 prescriptions of caspofungin. Males were a majority with 64.8% of the population. Mean age was 51 years. Caspofungin was indicated in accordance with the IDSA recommendations in 43.6% of the cases. The most case of non respect to the guidelines was the indication of caspofungin as empirical treatment in non neutropenic patients. Caspofungin was utilized as a first line treatment in 9 cases where it was possible to give fluconazole first, as germs were fluconazole- sensitive. Caspofungin was indicated in 2 patients with good renal function and in which nor amphotericin B, liposomal ampho B neither itraconazole had been previously used, as indicates the MA. The posology of caspofungin was respected in all prescriptions with a loading dose of 70 mg in the first day and a maintenance dose of 50 mg daily. Seven patients had received a daily dose of 70 mg, the recommended dose for people weighing more than 80 Kg. Caspofungin prescriptions are far to be adequately done. There is a clear need of optimization in indicating this molecule and that must be done in collaboration between the pharmacy department, the ICUs and parasitology department.

**Keywords :** caspofungin, prescription, intensive care units, marketing authorization, Tunisian hospital cohort

**Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020