

P. Granda<sup>1</sup>, M. Sánchez De Castro<sup>1</sup>, S. García<sup>1</sup>, A. Yuste<sup>1</sup>, P. Sánchez<sup>1</sup>, S. Heinz<sup>1</sup>, P. Prats<sup>1</sup>, MH. Gonzalo<sup>1</sup>, G. Ramirez<sup>2</sup>. <sup>1</sup>Pharmacy. <sup>2</sup> Infectious Diseases. Hospital Central de la Defensa Gómez Ulla. Madrid. Spain

### **BACKGROUND**

Amphotericin B (AmB) is a standard treatment for opportunistic fungal pathogens. Intravenous lipid formulations of AmB (L-AmB) allow the administration of higher doses. To achieve higher concentration in cerebrospinal fluid (CSF), intrathecal administration of L-AmB has been successfully used. Appearance of different Candida species in CSF are infrequent but critical, therefore, there are still significant knowledge gaps in intrathecal L-AmB pharmacodynamics and pharmacokinetics.

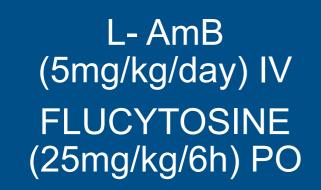
## **PURPOSE**

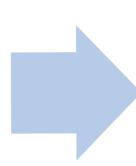
To describe the use of intrathecal L-AmB in Candida meningitis in one patient.

#### **MATERIAL AND METHODS**

A 59-year-old woman with a history of obesity with metabolic syndrome was admitted to the Neurosurgery Service for bilateral cerebellar ischemic infarction needing decompressive craniectomy. During her evolution she presented as a complication CSF fistula requiring lumbar draining and subsequent urgent surgical intervention. CSF analysis revealed total cells 1400/mm³, leukocytes 1398/mm³, 6.38 mg/dL of glucose and 315 mg/dL of protein. *C. albicans* and *Nakaseomyces glabrata* (previously named *C. glabrata*) were isolated in removed adipose flap and CSF, respectively. Intravenous and intrathecal antifungal therapy was required and so, the Pharmacy Service was asked to develop a L-AmB intrathecal injection.

## **RESULTS**





L-AmB INTRATHECAL (0.5 mg/day disolved in 3 ml of 6% dextrose)



De-escalation to
VORICONAZOLE
FLUCYTOSINE
L-Amb INTRATHECAL

Inability of removing lumbar drain

Persistence of infection

Good clinical/analitical/ microbiological evolution

INTRATHECAL L-AmB discontinued 20th day of treatment, when:

- ✓ CSF cell count, glucose and protein were OK
- ✓ Last four CSF cultures kept sterile.

WELL TOLERATED
NO SIDE EFFECTS

# CONCLUSION

Despite the limitations in the interpretation of this case report, the administration of intrathecal L-AmB may constitute a less toxic therapeutic alternative to conventional AmB (deoxycholate) for Candida meningitis.

