USE OF INTRATHECAL LIPOSOMAL-AMPHOTERICIN B FOR CANDIDA MENINGITIS: A CASE REPORT.

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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/mm^3, leukocytes 1398/mm^3, 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 (5mg/kg/day) IV
FLUCYTOSINE (25mg/kg/6h) PO

→ **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.**

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