

Amphotericin B

see [Intrathecal amphotericin B deoxycholate](#).

Amphotericin B is an [antifungal](#) drug often used intravenously for serious systemic fungal infections and is the only effective treatment for some fungal infections.

Common side effects include a reaction of fever, shaking chills, headaches and low blood pressure soon after it is infused, as well as kidney and electrolyte problems. Allergic symptoms including anaphylaxis may occur.

It was originally extracted from *Streptomyces nodosus*, a filamentous bacterium, in 1955, at the Squibb Institute for Medical Research. Its name originates from the chemical's amphoteric properties. It is on the World Health Organization's List of Essential Medicines, the most important medications needed in a basic health system.

It is of the polyene class. Currently, the drug is available in many forms. Either “conventionally” complexed with sodium deoxycholate (ABD), as a cholesteryl sulfate complex (ABCD), as a lipid complex (ABLC), and as a liposomal formulation (LAMB). The latter formulations have been developed to improve tolerability and decrease toxicity, but may show considerably different pharmacokinetic characteristics compared to conventional amphotericin B.

Indications

[Candida](#) spp: Liposomal amphotericin B 3–4 mg/kg IV daily + [flucytosine](#) 25 mg/kg PO QID

Case reports

A 52-year-old heart-lung transplant patient presented to the emergency department with acute onset of neurologic symptoms. MRI showed ballooning of the left ventricle, midline shift and contrast enhancement in the anterior horn of the left ventricle. Ventricle neuroendoscopy revealed whitish, floccose aerial structures within the left ventricle. Brain biopsy cultures grew *Rhizopus arrhizus*. Therapy with liposomale [amphotericin B](#) and posaconazole was performed. Except for hemianopsia and deficits in minute motor activity, the patient completely recovered ¹⁾.

¹⁾

Hagel S, Ewald C, Doenst T, Sachse S, Roedel J, Pletz MW. Ventriculitis due to infection with *Rhizopus arrhizus*. *Med Mycol Case Rep*. 2015 Dec 15;10:18-20. doi: 10.1016/j.mmcr.2015.12.004. eCollection 2015 Dec. PubMed PMID: 26862476; PubMed Central PMCID: PMC4706622.

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