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Dexamethasone in Cryptococcal Meningitis

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Beardsley et al 1 report a randomized clinical trial of adjunctive dexamethasone amongst a group with HIV+-associated cryptococcal meningoencephalitis, clearly showing the disadvantage of corticosteroid therapy in HIV-infected primary cryptococcal infections prior to microbiological control. We would like to stress, however, that the results are not necessarily applicable outside of an HIV-infected population because the host immune response in CNS infections is an important effect modifier. Specifically, cryptococcal meningoencephalitis after microbiological control in the setting of other underlying illnesses or in the previously healthy is frequently followed by robust intrathecal inflammation². In this setting, adjunctive corticosteroids may have benefit^{3,4}. Indeed, in an ongoing observational cohort study being performed to evaluate risks and outcomes of cryptococcal disease in the non-HIV population ("CINCH"), 80% of patients who ultimately received corticosteroids as adjunctive therapy for CNS inflammation after microbiologic control have had favorable results in functionality and survival. Further study to understand the underlying pathology and apply more specific immunomodulatory or cerebral edema reductive approaches to disease management outside the untreated, high-fungal burden HIV + population should thus be considered.

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