Cerebral Chromoblastomycosis

Cerebral Chromoblastomycosis: A Unique Presentation of Dematiaceous Fungal Infection in an Immunocompromised Patient

In a case report – culture/histopathology confirmed. Norton Stephen et al. from AIIMS Madurai (Madurai), JIPMER Puducherry (Puducherry), Neurosurgery JIPMER Puducherry. published in Annals of Indian Academy of Neurology. to report an unusual intracranial dematiaceous fungal infection ("cerebral chromoblastomycosis") in an immunocompromised host. Demonstrates that dematiaceous fungi can invade the CNS in immunosuppressed patients, presenting as brain abscesses; underscoring need for high suspicion, tissue diagnosis, and tailored antifungal therapy [1].

Critical Review

1. **Novelty & Rigor:**

    1. Rare case: cerebral infection by pigmented dematiaceous fungus is exceedingly uncommon. Prior reports mostly in immunocompetent individuals :contentReference[oaicite:0]{index=0}.
    2. Methodology strong: pathology plus culture confirmation; however, imaging, antifungal regimen, and clinical course not detailed in provided abstract.

2. **Limitations:**

    1. Lack of comprehensive clinical data: dose/duration of therapy, immune status specifics (CD4, neutrophils), imaging, follow-up.
    2. Single-patient report: low evidence level, cannot generalize treatment outcomes or prognosis.

3. **Contextualization:**

    1. Builds on rare prior cases from India and abroad :contentReference[oaicite:1]{index=1}.
    2. Adds by highlighting immunocompromise as a risk—less emphasized previously.

4. **Take-home for neurosurgeon:**

    1. In immunocompromised patients with intracranial abscesses, include dematiaceous fungi in differential.
    2. Early biopsy/culture and combined medical–surgical management critical; delayed diagnosis likely worsens outcome.

5. **Verdict:**

    1. Despite lacking granularity, this well-documented rare case merits attention.
    2. Score: **6/10** (novelty strong, clinical details modest, limited generalizability).

Bottom Line for Practicing Neurosurgeon

Consider dematiaceous fungal abscesses (chromoblastomycosis/phaeohyphomycosis) in immunosuppressed patients with brain lesions; surgical biopsy and pathogen-directed antifungal therapy are essential.

Metadata

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Categories

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Tags

chromoblastomycosis, dematiaceous_fungi, brain_abscess, immunocompromised, case_report, invasive_mycosis

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