A Case of Langerhans Cell Histiocytosis Presenting with Bilateral Otorrhea

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Langerhans cell histiocytosis (LCH) involves the proliferation and accumulation of Langerhans cells at various sites and presents with various symptoms, depending on the organ or organs invaded. A 2-year-old boy with LCH was treated at our hospital. Fever, head rash, bilateral chronic otorrhea unresponsive to antibiotics, and left exophthalmos were observed at our first examination. The CT scan showed destruction of the skull bone, zygomatic bone and vertebrae, and masses within these lesions. No bony defect was detectable in the middle ear, but a mass was present in the external auditory meatus. Skull X-rays revealed characteristic “punched-out” lesions. We confirmed the diagnosis of LCH with a biopsy of the head mass and the external auditory meatus mass. Immunohistology revealed positive staining of the lesional cells with CD1a and Langerin (CD207). The final diagnosis was multisystem LCH (MS-LCH). The child was placed on the chemotherapeutic regimen recommended by the Histiocyte Society.

Keywords: otorrhea, Langerhans cell histiocytosis (LCH), rash

References

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Axial CT scan showing mass lesions in the bilateral external auditory canals and the right middle ear.

Histopathologic examination showing eosinophilic large cells (a: H&E; original magnification X200) positive for CD1a (b: original magnification X100) and Langerin (c: original magnification X100).