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Exteriorisation of the Ommaya Reservoir Secondary to Wound Dehiscence in a Case of ALL

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A 41-year-old male a case of acute lymphoblastic leukaemia with C3 disease (CNS involvement) was being managed with modified BFM-90 protocol. For his CNS positive disease, he was planned for intensive triple intrathecal therapy. For the ease of administration of intrathecal and to ensure adequate distribution of chemotherapeutic agents, he was subjected to Ommaya reservoir placement. There were no immediate postoperative complications. The patient received 04 intrathecal therapies through the reservoir as inpatient and was subsequently discharged after CSF was negative and managed as an outpatient. He presented to OPD on D₄₀ of Ommaya insertion with complaints of wetness of the scalp near the site of insertion.

Physical examination revealed exteriorisation of Ommaya with CSF leak. CSF examination revealed no evidence of meningitis. Patient hasn't received any radiation to lead to wound dehiscence.

An Ommaya reservoir is a synthetic dome that is surgically placed beneath the scalp and attached to a catheter directed into a ventricle. Complications associated with Ommaya reservoir include technical complications such as misplacement of the catheter, intraventricular haemorrhage, malfunctioning reservoirs, and bacterial meningitis [1]. Other complications included wound dehiscence, ventricular catheter associated cerebral oedema and leakage of cerebrospinal fluid. With wound dehiscence, a superficial wound infection can easily track to the CSF and intracranial cavity resulting in serious intracranial complications. Countersinking is a good technique to prevent wound dehiscence, device extrusion and in irradiated patients with very thin skin, it also enables tension-free closure of the wound [2]. Our patient had wound dehiscence and CSF leak with our associated meningitis in the absence of radiation to scalp at D₄₀ which is an uncommon complication. It is thus mandatory to do a regular local physical examination of the scalp in a patient with Ommaya reservoir (Figs. 1, 2).

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Authors Contribution All authors were involved in the management of the patient. YU and AK were involved in the manuscript preparation. All authors vetted the submitted manuscript.

Compliance with Ethical Standards

Conflict of interest Dr. Uday Yanamandra declares that he has no conflict of interest. Dr. Eshita Raju declares that she has no conflict of interest. Dr. Rajan Kapoor declares that he has no conflict of interest. Dr. Suman Pramanik declares that he/she has no conflict of interest. Dr. Satyaranjan Das declares that he/she has no conflict of interest.

Fig. 1 X-ray of the skull immediately post-surgery showing normal position of the Ommaya reservoir in the lateral view

Fig. 2 The exteriorization of the Ommaya reservoir secondary to wound dehiscence highlighted by the insert

the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from the patient described in the study.

References

1. Lishner M, Perrin RG, Feld R, Messner HA, Tuffnell PG, Elhakim T et al (1990) Complications associated with Ommaya reservoirs in patients with cancer. The Princess Margaret Hospital experience and a review of the literature. *Arch Intern Med* 150(1):173–176
2. Singh M, Rios Diaz AJ, Golby AJ, Caterson EJ (2015) “Countersinking” of reservoir in an irradiated patients can decrease tension on scalp closure. *Surg Neurol Int* 6(Suppl 11):S334–S336

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of