

“Syndrome of Inappropriate Antidiuretic Hormone Secretion” as a Diagnostic and a Prognostic Indicator in Olfactory Neuroblastoma

Sir,

We had two patients in our institute, who were found to have syndrome of inappropriate antidiuretic hormone (SIADH) along with olfactory neuroblastoma (ONB). The first patient was a 21-year-old female, who presented with intermittent altered sensorium. She was already diagnosed to have ONB, Kadish Stage B and was scheduled for surgery. On further evaluation, she was found to have persistent hyponatremia with euvolemia, increased urinary sodium, and plasma hypertonicity. After supplementing intravenous sodium along with restriction of fluid intake, her symptoms improved and she was taken up for surgery under general anesthesia. Postoperatively, her hyponatremia got normalized, and she received adjuvant radiotherapy. She is disease free at 5 years of follow-up and never had any episode of hyponatremia again.

Another patient was a 24-year-old male, who had sinonasal mass with hyponatremia. The sodium levels were persistently low and did not respond to treatment. On pathological examination, the sinonasal mass, which had intracranial extension on radiology, turned out to be ONB. The patient had to undergo high-risk surgery due to persistent hyponatremia; however, he continued to have hyponatremia postoperatively and expired due to progressive disease within weeks of surgery.

Although there are earlier reports of association of SIADH with ONB, this letter/brief communication is aimed at readdressing the significance of such an association. Before these two cases, around forty cases of SIADH with ONB have been reported in literature.^[1] In an earlier review, it has been

shown that hyponatremia has preceded the diagnosis of ONB in 76% cases of SIADH associated with ONB.^[2] The mean duration between diagnosis of SIADH or hyponatremia and esthesioneuroblastoma has been estimated to be around three and half years.^[3] Thus, all cases of SIADH due to unknown etiology should be worked up for esthesioneuroblastoma and should be closely followed up. It has been said that the association of SIADH before treatment does not appear to negatively impact the initial management of ONB. However, if the hyponatremia does not normalize after excision of ONB, incomplete tumor removal (residual disease) should be suspected, which is a poor prognostic factor. Furthermore, once normalized, the reappearance of hyponatremia during follow-up should mandate workup for the recurrence of tumor after excluding hyponatremia due to chemotherapeutic agents.^[4]

To summarize, the possibility of ONB should be considered while managing a case of unexplained hyponatremia or SIADH. After treatment of ONB, the presence and absence of SIADH indicate residual/recurrent disease and complete removal of disease, respectively, thus giving it a prognostic value.

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Conflicts of interest

There are no conflicts of interest.

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