



# AB169. SOH23ABS\_236. Multi-factorial hyponatraemia exacerbated by linezolid (case report)

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**Background:** Hyponatremia is a common electrolyte abnormality in the setting of the intensive care unit. Critically ill patients often have multiple factors making them susceptible to hyponatremia. The syndrome of inappropriate antidiuretic hormone (SIADH) secretion is one of the main causes of euvolemic hyponatremia and is often associated with medications. Linezolid is a potent antibiotic against resistant Gram-positive microorganisms. Some studies report an association between hyponatremia and linezolid.

**Methods:** We report the case of a 59-year-old male smoker with multiple comorbidities who was admitted with abdominal pain, confusion and weight loss. He had a high temperature, hyponatremia (127 mmol/L) and signs of a lower respiratory tract infection. He gave a history of recent alcohol ingestion. A computed tomography (CT) was done which showed acute diverticulitis and a large paracolic abscess which was drained by the interventional radiology (IR) service. Despite this he developed sepsis and was subsequently intubated and ventilated. He had a second IR guided drainage procedure followed by surgery and a complicated postoperative course. A tracheostomy was required to facilitate weaning from the ventilator. During the weaning period, linezolid was commenced to cover a persistent lower respiratory tract infection.

**Results:** Shortly afterwards, significant hyponatremia occurred which resolved temporarily once the linezolid was stopped. Biochemical investigations confirmed SIADH. Although linezolid associated hyponatremia is uncommon,

a recent retrospective study reported an 18% incidence of SIADH-induced hyponatremia reported in patients receiving linezolid.

**Conclusions:** Length of linezolid exposure, age, and baseline sodium levels have been found to be risk factors for linezolid-related hyponatremia. Close monitoring of electrolytes is recommended for patients at risk who need this medication, especially elderly and patients with low serum sodium levels before the start of linezolid administration.

**Keywords:** Hyponatraemia; linezolid; Naranjo scale; syndrome of inappropriate antidiuretic hormone (SIADH); sodium

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## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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