



ABS028

LINEZOLID INDUCED LACTIC ACIDOSIS: A CASE REPORT

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Linezolid is an oxazolidinone antibiotic used to treat a variety of gram-positive infections, including those due to methicillin-resistant *Staphylococcus aureus* and vancomycin-resistant *enterococci* as well as nocardia species. Prolonged therapy with linezolid has been linked to rare instances of lactic acidosis and liver injury probably as a result of hepatic mitochondrial toxicity.

The lactic acidosis due to linezolid has been linked to injury to hepatic mitochondria and with microvesicular steatosis, but is usually rapidly reversed with withdrawal of therapy.

This case report is about a 70 year old female patient admitted in the Medical Intensive Care Unit (MICU) with the complaints of vomiting since two days, difficulty in breathing, facial puffiness and decreased urine output. ABG (Arterial Blood Gas) analysis showed elevated potassium, low sodium and correction started for the same.

Patient had a history of taking tablet Linezolid and tablet Diclofenac since one month status post her spinal surgery. On the second day of admission in MICU, the patient was found to have Linezolid induced lactic acidosis from the ABG analysis with lactate 87mmol/L and HCO₃⁻ 18mEq/L and linezolid was withheld.

Lab results also showed anemia, thrombocytopenia, abnormal creatinine, blood urea nitrogen values and bone marrow suppression after the admission. Anemia and thrombocytopenia was treated using thiamine adjunctive therapy from day 2. Urine culture test showed presence of Amp C *Klebsiella* (colony forming units-CFU=80,000) and was prescribed Injection Clindamycin 600mg and Meropenem (1gm every 8 hourly).

Acute Kidney Injury (AKI) was suspected but resolved with dialysis. As the patient's condition improved she was shifted to the general ward on the 8th day but was found to have tachypnea and bradycardia thus intubated and mechanically ventilated. Gradually she became better but pleural effusion was noted in lung scan, tap was done and was transudative in nature. Therefore patient was extubated and later on 11th day urine culture sensitivity showed *Candida tropicalis* (greater than 1 lakh fungal colony count-FCC) for which Injection Fluconazole (400mg) was started. In the general ward her treatment continued with intravenous antibiotics, regular medications and other supportive measures, improved with the treatment and was discharged in a stable condition.

Conclusion: Physicians should be aware about the adverse effects of antibiotics and closely monitor for the effects before starting longterm therapy of antibiotics.

Keywords: Linezolid, Lactic acidosis, ADRs