

Case Report

Postoperative bilateral parotid gland swelling following spinal anaesthesia: A case report and literature review

Md. Mosharaf Hossain¹, Md. Mostafa Kamal², Nazem Ahmed³, Md Bablu Hossain⁴

¹Junior Consultant, Dept. of Anaesthesia, ICU and Pain Medicine, Rajshahi Medical College and Hospital, Rajshahi, Bangladesh. ORCID ID: 0009-0000-5343-7175. ²Assistant Professor, MOHFW & Clinical Fellow, Pain Medicine, BMU, Dhaka, ³Assistant Professor, Dept. of Anaesthesia Analgesia and ICU, National Institute of Traumatology & Orthopaedic Rehabilitation (NITOR), ⁴Assistant Professor (Anesthesiology), Sir Salimullah Medical College Mitford Hospital, Dhaka, Bangladesh.

Corresponding Author: Dr. Md. Mosharaf Hossain, E-mail: dr.mhpalash47@gmail.com ORCID: 0009-0000-5343-7175

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Background:

Acute transient parotid gland swelling, colloquially known as “anesthesia mumps,” is a rare postoperative complication, typically associated with general anaesthesia. Its occurrence following spinal anaesthesia, particularly in obstetric procedures, is exceedingly uncommon.^{1,4-6} Awareness of this benign and self-limiting condition is essential to prevent unnecessary diagnostic interventions and patient anxiety.

Case Presentation:

A 32-year-old multiparous woman (ASA II) with no comorbidities was admitted for an elective repeat cesarean section under spinal anaesthesia. She had previously undergone an uneventful cesarean delivery with spinal anaesthesia. Following informed consent, spinal anaesthesia was performed at L3–L4 with 12 mg hyperbaric

bupivacaine and 10 mcg fentanyl. A T4 sensory block was achieved, and hypotension was managed with two 5 mg boluses of ephedrine. A healthy female neonate (3565 g) was delivered 3.5 minutes after skin incision, with Apgar scores of 9 and 10 at 1 and 5 minutes, respectively. Oxytocin infusion was started post-delivery. The intraoperative course was uneventful.

Five hours postoperatively, the patient developed bilateral, painless preauricular swelling without systemic symptoms. She denied fever, facial weakness, or history of autoimmune, allergic, or toxic exposures. Examination revealed symmetrical, firm, non-tender, slightly compressible, about 4×3 cm swellings with normal overlying skin and clear ductal discharge. Facial nerve function and laboratory tests, including CBC, amylase, and electrolytes, were normal.



Fig.-1: Front view of the patients parotid swelling



Fig.-2: Side view of the patient's parotid swelling

She received IV paracetamol, pheniramine, and dexamethasone. IV fluids were given at 5 mL/kg/h, and oral intake resumed at six hours post-op. By the twelfth hour, swelling had significantly reduced bilaterally without further intervention.

Review of Literature:

Postoperative parotid gland swelling, also known as “anesthesia mumps,” is an infrequent and typically benign complication most commonly associated with general anaesthesia.² The exact incidence is unclear, but its occurrence following spinal anaesthesia—particularly in obstetric patients—is exceedingly rare, with only a handful of published case reports.^{1,4-6} Proposed mechanisms include autonomic imbalance due to sympathetic blockade, perioperative dehydration leading to transient salivary duct obstruction, and drug-induced reactions, including opioids or oxytocin-related fluid shifts. In 2002, Shinoda and Shimizu reported parotid swelling with hyperamylasemia after cesarean section under regional anaesthesia.¹ More recent reports, including those describe similar presentations in otherwise healthy parturients undergoing spinal anaesthesia^{3,6,8}. These cases, like ours, presented with painless^{5,6}, non-infectious, and self-limiting gland swelling. Management in the literature is generally conservative⁴⁻⁶, involving hydration, corticosteroids, and antihistamines, with rapid resolution⁴⁻⁶. These findings support the need for increased awareness among anesthesiologists and obstetricians to avoid unnecessary investigations or antibiotic use in the absence of infection and to provide reassurance and appropriate supportive care.

Conclusion:

Postoperative acute parotitis following spinal anaesthesia is a rare but benign condition that can occur after cesarean delivery^{1,3-6}. Conservative

management is usually sufficient. Anaesthesiologists should include this entity in the differential diagnosis of postoperative facial swelling to ensure appropriate and timely care²⁻⁷.

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