

# Bilateral Parotitis after Caesarean Section under Spinal Anaesthesia

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## ABSTRACT

We describe the case of a 32-year-old (Gravida2, Para1, Live1) woman who had late-onset foetal growth restriction (FGR) at 36 weeks gestation and had a history of lower segment caesarean section (LSCS) and gestational diabetes mellitus (GDM) treated with oral hypoglycaemic medications. She experienced a non-reassuring non-stress test (NST) in spite of normal Doppler indices, necessitating emergent LSCS under spinal anaesthesia. Intraoperatively, she had acute hypertension and headache, which were treated with intravenous labetalol and magnesium sulphate. Postoperatively, she suffered transitory bilateral parotid swelling that reduced with fluids and corticosteroids. Both the mother and the newborn were discharged in a stable state. This example emphasizes the necessity of careful peripartum surveillance and the significance of identifying uncommon postoperative complications like parotitis, even after regional anaesthesia.

**Keywords:** Caesarean section, Parotitis, Spinal anaesthesia, Anaesthesia mumps

## Introduction

Although postoperative parotid swelling, also known as "anaesthesia mumps," is well-documented after general anaesthesia, it is extremely uncommon to occur after spinal anaesthesia. After receiving spinal anaesthesia for an emergency caesarean delivery, we report a case of bilateral parotitis.

## Introduction

Due to late-onset FGR, a 32 year-old woman (G2P1L1) at 36 weeks gestation who had previously

undergone LSCS and had GDM on oral hypoglycaemic medications was admitted for foetal observation. She was stable upon examination; the foetal heart rate was 140 bpm with cephalic presentation, and the uterine size matched 32 weeks. The non-reassuring NST prompted the planning of an emergency LSCS. Using a 25G Quincke needle and 2.2 mL of 0.5% hyperbaric bupivacaine, the procedure was carried out under spinal anaesthesia, following which a healthy baby was delivered.

Intravenous labetalol and magnesium sulphate were used to treat the patient's severe hypertension (BP 200/110 mmHg) that developed during surgery, and Labetalol infusion was continued post-operatively because of the ongoing hypertension (170/80 mmHg).

The patient experienced bilateral tender parotid swelling on the first postoperative day (POD). Serum amylase was high (762 U/L), and she was afebrile. Analgesics, sufficient hydration, and intravenous Dexamethasone 8 mg once daily for three days were used to control the swelling.

She was ambulated by POD-2. Gradually, her blood pressure stabilized. Her parotid swelling had totally subsided by POD-4, and she was discharged with instructions for follow-up and oral antihypertensives.

## DISCUSSION

Anaesthesia mumps, also known as transient postoperative parotid swelling, is an uncommon and self-limiting side effect. It is thought to be caused by venous congestion, dehydration, mechanical obstruction, or autonomic instability and is most frequently linked to general anaesthesia. Acute parotitis following surgery was first documented in by Spiro RK et al in 1960(1).

In obstetric patients, parotitis after spinal anaesthesia has been reported, however it is uncommon. According to Thirumagal et al., bilateral acute parotitis that developed under spinal anaesthesia just after caesarean delivery went away with corticosteroids, antihistamines, and hydration (2). Similarly, a case that presented 18 hours after spinal anaesthesia for LSCS and resolved with supportive care was reported by Moisei et al.(3). The fact that this syndrome might arise without infection or airway manipulation was highlighted in both patients.

On the other hand, following general anaesthesia, parotid swelling is more commonly documented, especially in patients who were positioned lateral or prone during spinal surgery (4,5). Conservative

treatment usually resolves these situations(6). Dehydration-induced temporary blockage of parotid secretions has also been linked to parotitis during epidural anaesthesia(7).

Severe cases have caused airway obstruction, despite the fact that they are often benign. Li et al reported airway compromise following radical nephrectomy that required ventilatory support and antibiotics, while Hamaguchi et al. reported a patient requiring postoperative re-intubation (8,9).

The lack of airway manipulation in our patient indicates that perioperative stress and dehydration were probably causative. Preventive strategies include minimizing the use of anti-sialagogues, preventing significant neck flexion or compression, maintaining proper hydration, and gently managing the airway. Full recovery is typically the outcome of conservative treatment with fluids, corticosteroids, and anti-inflammatory drugs (2,6).

## CONCLUSION

Even without airway instrumentation, spinal anaesthesia can result in the uncommon but benign condition known as anaesthesia mumps. To prevent incorrect diagnoses and needless investigations, awareness of this entity is crucial. Rapid recovery is ensured by early detection and conservative measures. In order to manage unforeseen peripartum problems like bilateral parotitis, this example emphasizes the importance of attentiveness and interdisciplinary cooperation.

## DECLARATION OF PATIENT CONSENT

The authors attest to having acquired all necessary patient permission documents. The patient has consented on the form for the journal to publish her clinical data and photos. The patient is aware that every attempt will be made to hide her identity and that neither her name nor her initials will be published.

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## CONFLICTS OF INTEREST

There are no conflicts of interest.

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