

## CASE REPORT

# Anesthesia Mumps: An Unusual Presentation

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## ABSTRACT

Anesthesia mumps is an acute transient swelling of parotid gland following general anesthesia. There are several case reports of anesthesia mumps postoperatively in adults, however there are very few reports in children. Increase in secretions along with improper drainage of saliva causes enlargement of parotid gland. This article lists the various causes implicated for this and the methods to prevent its occurrence. The purpose of this article is to highlight the occurrence of anesthesia mumps in pediatric patient even after a short procedure.

**Keywords:** Acute transient swelling, Anesthesia mumps, General anesthesia, Parotid gland.

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## INTRODUCTION

Anesthesia mumps is an acute transient swelling of parotid gland following general anesthesia. There are several case reports of postoperative anesthesia mumps in adults; however, there are very few reports in children. This is usually a benign condition which regresses on its own.

## CASE HISTORY

An 8-year-old boy was posted for right eye cataract surgery under general anesthesia.

Preoperative assessment was done. There was a past history of corneal suturing done under general anesthesia for trauma to right eye. Blood investigations were normal. A 22-gauge intravenous access was established and monitors were attached. The patient was premedicated with injection atropine 0.24 mg, injection midazolam 0.4 mg, and injection fortwin 18 mg. Following premedication the patient was induced with injection propofol 70 mg, and injection scoline 40 mg was given after confirming ventilation. The patient was intubated with plain endotracheal tube number 5.5, air entry bilaterally equal (AEBE),

tube was fixed and throat was packed. The patient was maintained on oxygen, nitrous oxide, and isoflurane with Jackson Rees circuit and vecuronium as muscle relaxant. The patient was reversed and extubated postoperatively. After the surgery diclofenac suppository 25 mg inserted per rectally. Postextubation the patient was responding to oral commands and maintaining saturation.

After a few minutes the patient developed bilateral submandibular swelling. There was no pain, dyspnea, or difficulty in swallowing. Swelling was diffuse, there was no crepitation, and the overlying skin was normal.

Oxygen with nasal prongs was started at 2 L/minute. Injection hydrocortisone 50 mg and injection dexamethasone 3 mg was given. The patient was awake, comfortable, and maintaining vitals.

The patient was observed for 4 hours, his parents were counseled, the benign nature of the condition explained, and then discharged.

The swelling regressed completely on the next day.

## DISCUSSION

Anesthesia mumps was first described by Attas et al in 1968.<sup>1</sup> The incidence is about 5 in 3,000 endotracheal anesthesia cases, as reported by Matsuki et al.<sup>2</sup> Increase in secretions along with improper drainage of saliva causes enlargement of salivary glands.<sup>3</sup>

Various causes<sup>4,5</sup> implicated for this are as follows: (1) Straining and/or coughing on the tube; (2) retention of secretions can block the salivary ducts. (3) dehydration can thicken secretions and cause salivary duct occlusion; (4) head positioning – commonly seen in prone, lateral, sitting, or head extension positions; (5) allergies; (6) mechanical trauma to laryngeal structures during endotracheal intubation; (7) anesthetic medicines – antihistaminics, atropine, succinylcholine, ketamine, and benzodiazepines.

Anesthesia mumps can be prevented by premedication with anticholinergic drugs, limitation of the range of neck flexion/rotation to maintain normal venous blood circulation, sufficient padding while positioning, adequate hydration, and smooth intubation and extubation.

## CONCLUSION

This case report highlights the occurrence of anesthesia mumps in pediatric patients after cataract surgery which is self-resolving and uncommon.

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