

## Acute Bilateral Submandibular Region Enlargement Following General Anesthesia: A Case Report

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**Signalment:** A 7-month-old male poodle was referred to Veterinary Medicine Teaching Hospital of Seoul National University for diagnosis and surgery of portosystemic shunt (PSS). Consistent elevated liver enzyme (AST, ALP) and ammonia level with low total protein level was observed in serum chemistry from first presentation until surgical correction.

**Results:** Anesthesia was performed 2 times. First anesthesia was for CT scan to confirm PSS. General anesthesia was induced with intravenous propofol (6 mg/kg) without any other premedication and maintained with isoflurane. Patient recovered without any problem. About 1 and a half month later, second anesthesia was performed for surgery. Tramadol (1 mg/kg), ranitidine (2 mg/kg), cefazolin (44 mg/kg), dexamethasone (0.2 mg/kg), and glycopyrrolate (0.02 mg/kg) were administered for premedication. After intubation following induction with propofol, patient received atracurium (0.2 mg/kg) for neuromuscular block and mechanical ventilation, and anesthesia was maintained with isoflurane. During 80-minute surgery, patient was in the dorsal recumbency and fluid (normal saline with 2.5% glucose) was given as rate of 10 ml/kg/hr. After endotracheal extubation in sternal recumbency, bilateral swelling of submandibular region was noted. Diffused edema over submandibular region was palpated without erythema, crepitation or tenderness. Fluid collected from the edema region was colorless and serous. There was no complaint for painful sensation. The swelling resolved spontaneously over a few days without any other complications and recurrence.

**Clinical relevance:** Transient acute salivary gland swelling after general anesthesia is rare and called anesthesia mumps. In this case, transient swelling of submandibular region was concluded to be an anesthesia mumps from its clinical features and use of glycopyrrolate was strongly suspected as a reason of symptom.

**Key words:** general anesthesia, anesthesia mumps, submandibular region swelling, anticholinergics

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