Letter to the Editor

Acute unilateral swelling of parotid gland after general anesthesia: Anesthesia Mumps

Anesthesia mumps after general anesthesia

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To the editor,

Unilateral or bilateral acute swelling of the parotid glands after surgery, known as anesthesia mumps (AM) (1-4). AM was first described in 1960 and the incidence is reported as 0.16-0.2% (5). The mechanisms that lead to AM have not yet been elucidated. We aimed to raise awareness of both the anesthesia team and the surgical team in a rare case of AM.

Total abdominal hysterectomy and debulking surgery were planned for the 46-year-old female patient due to endometrium cancer. She did not have any co-morbid disease and abnormal laboratory findings before the surgery. In the operating room, after preoxygenation with 100% oxygen, we applied anesthesia induction with 0.2 mg/kg midazolam, 2.5 mg/kg propofol, 1 mcg/kg fentanyl and 0.6 mg/kg rocuronium. We continued mask ventilation for two minutes with an average airway pressure of 20 cmH2O. After the endotracheal intubation, we used 50% oxygen and 50% air, 6 vol% desflurane, 0.5 mcg/kg/min remifentanil infusion and 0.15 mg/kg rocuronium for anesthesia maintenance. The operation was performed in the supine position and lasted for 5 hours. During the operation, we gave the patient 3000 ml of crystalloid, 2 units of erythrocyte suspension and 2 units of fresh frozen plasma. At the end of the operation, we extubated the patient using 2 mg/kg sugammadex and administered 1 g paracetamol and 100 mg tramadol for postoperative pain treatment. Sudden, painless swelling occurred in the right parotid region at the 5th hour postoperatively. The patient was diagnosed as acute parotitis by physical examination and ultrasonography after an otorhinolaryngology consultation. We performed dexamethasone, non-steroid anti-inflammatory drugs, warm compression and hydration. We discharged the patient, whose complaints regressed, on the 11th postoperative day. Then, informed consent was obtained from the patient in order to publish data regarding her case.

Many factors are thought to play a role in AM mechanism (1, 5). Firstly, due to muscle relaxation during general anesthesia and positive pressure mask ventilation applied into the mouth, air enters the parotid glands retrogradely and causes pneumoparotitis (3). In addition, AM may be the result of obstruction of the salivary canal in cases of excessive stress, coughing and sneezing in patients who continue positive pressure ventilation during awakening from general anesthesia (1). Another mechanism is the over-rotated head position and compression of the parotid gland as a result of obstruction of the parotid canal during prolonged operations. In addition, drugs used during the operation, such as atropine, succinylcholine, morphine and inhalation anesthesia, can lead to obstruction of the salivary tract in patients who do not achieve adequate hydration by reducing and thickening salivary secretion (2). We think that this mechanism is effective in our patient. AM may regress spontaneously within 48 hours or there may be a longer need for symptomatic treatment (2, 3). Adequate hydration, pain control and warm compress application can help relieve symptoms.

In conclusion, it is the most important issue to address the concerns of patients and their families by stating that AM is a temporary condition.
References