Midazolam is one of the most widely used sedative agents in gastroenterology practice for conscious sedation before short endoscopic procedures [1]. We report a case of transient swelling of the parotid gland after midazolam administration.

A 55-year-old woman with suspected peptic ulcer underwent upper gastrointestinal endoscopy. Before the procedure 2 mg intravenous midazolam was administered. Lidocaine spray was used for local anesthesia. A few minutes after the procedure she complained of swelling on the left side of her neck. Palpation showed a firm mass without erythema or tenderness in the parotid gland region (Fig. 1). Her previous medical history was unremarkable except for mumps when she was a child. Laboratory findings were normal. Neck ultrasonography revealed parotitis without salivary duct calculi or lymphadenopathy. The swelling disappeared spontaneously after 48 hours. She had no further complaint of this nature during 3 months’ follow-up.

Acute and chronic swelling of the salivary glands may occur in various disorders including mumps, postoperative parotitis, amyloidosis, tuberculosis, and some autoimmune disorders and malignancies. Noninflammatory parotid enlargement is seen occasionally in association with malnutrition, obesity, and liver disease [2]. Swelling of the salivary glands after general anesthesia, termed “anesthesia mumps”, is a rare event. It has been reported after endotracheal intubation, bronchoscopy, and upper gastrointestinal endoscopy [3]. The conditions are usually unilateral and painless and spontaneously resolve in a few hours. Although the exact mechanism is not fully understood, retrograde passage of air due to a loss of muscle tone around Stenson’s orifice, retention of secretions causing a blockage of the salivary ducts, dehydration, and head positioning during the procedure may have a pathogenetic role [4].

All “anesthesia mumps” cases in the literature have been attributed to general anesthesia. Our case report is unique in describing this complication after conscious sedation with midazolam.