ABSTRACT

Evaluate the effects of embolization using liquid embolic agent (Onyx) in surgery for jugulotympanic tumors with regard to length of stay in hospital, duration of procedure, signs of facial palsy, intraoperative hemorrage and postoperative complications.

INTRODUCTION

Evaluate the effects of embolization using liquid embolic agent (Onyx) in surgery for jugulotympanic tumors with regard to length of stay in hospital, duration of procedure, signs of facial palsy, intraoperative hemorrhage and postoperative complications.

Case 1: RMFLB is a 50-year-old female patient who was admitted to the service due to pulsatile tinnitus and hearing loss for over a year of evolution. After the first examinations identified a tympanic paraganglioma type B Fisch, measuring approximately 2 cm and involving the incus that was involved by the tumor, bleeding less than expected. The surgery lasted 90 minutes and had complications, such as facial paralysis. The postoperative course was uneventful and the patient was discharged with 48 hours of surgery.

Case 2: LFOLF is a 57-year-old female patient who had a large lesion emerging from the right external auditory canal with progressive growth for 5 years but accelerated in the last year. After reviewing the lesion in arteriography before embolization and therefore was chosen a surgical treatment. The patient underwent a local resection of the mass, however accessing the reddish pulsatile mass we found a large volume of bleeding. There were no complications during surgery, the volume of bleeding was excessive and the patient was released 48 hours.

Case 3: RBS is a patient of feminine sex of 62 years who presented a peripheral facial palsy grade V of House-Brackmann associated with pulsatile tinnitus. CT showed a tympanic paraganglioma type B Fisch, emissary was performed superselective of occipital, middle meningeal and ascending pharyngeal arteries. After 48 hours the patient underwent tympanomastoidectomy with removal of the mass and sinus, the surgery was 120 min without complications, reduced bleeding, no worsening of facial palsy. After surgery the patient experienced episodes of intense dizziness and needed hospital treatment for 5 days after surgery.

Case 4: JMS is a patient of feminine sex of 55 years admitted with a jugulotympanic paraganglioma type C1 Fisch involving the jugular bulb was performed embolization of the occipital artery, middle meningeal and ascending pharyngeal, occurred a peripheral facial paralysis as a complication. After 5 days the patient underwent a tympanomastoidectomy with cervical extension of access for exploration of the skull base. The patient evolved without complications in the postoperative period and was discharged in 7 days.

DISCUSSION

The most commonly used embolic agent is the fast polymerizing liquid adhesive, n-butyl cyanoacrylate (BCA). The use of BCA requires experience and skills, because intranidal flow and polymerization of BCA are quick and difficult to control. Recently, a new liquid embolic agent became available: Onyx liquid embolic system. Onyx is less adhesive and polymerizes slowly, which makes it advantageous over BCA, moreover has the same advantages of embolization of paragangliomas as embolization of paragangliomas has the same advantages of embolization of paragangliomas. The main current indication of Onyx is for the treatment of skull base glomus jugulare tumors, causing a higher standard of embolization and the possibility of control of flow of blood and tumor. Our experience with use of Onyx for embolization of paragangliomas is encouraging, with an average ischemia and volume reduction of 90% with peripheral facial palsy.

REFERENCES