Fine-needle aspiration of a retropharyngeal lymph node guided by endoscopic ultrasonography

Recently, we developed a novel, minimally invasive technique – endoscopic ultrasonography-guided fine-needle aspiration (EUS-FNA) via the nasopharynx – to obtain tissue samples from a retropharyngeal lymph node (RPLN) in a patient with suspected recurrence of nasopharyngeal carcinoma [1]. A schematic diagram of EUS-FNA of an RPLN is shown in Fig. 1a.

In April 2015, a 50-year-old man who had received chemoradiotherapy for nasopharyngeal carcinoma 2 years earlier was admitted to the Sun Yat-sen University Cancer Center. Magnetic resonance imaging displayed an enlarged RPLN of 2.0×1.6cm in size and with central enhancement on T1-weighted contrast-enhanced imaging (Fig. 1b) [2]. Nasopharyngoscopy revealed nasopharyngeal mucosal roughness and local scarring, are seen on nasopharyngoscopy. An enlarged retropharyngeal lymph node (RPLN), which is roughly round and hypoechoic, is visualized by EUS. The RPLN is adjacent to the carotid sheath, which contains the internal carotid artery (ICA) and internal jugular vein (IJV) (Fig. 1c).

Under real-time EUS guidance, a dedicated 22-gauge aspiration needle (NA-201SX-4022; Olympus) was used to puncture the RPLN; the needle was then withdrawn under 10 mL of suction pressure (Fig. 1d). The obtained tissue samples were sent for pathological and cytological examination. This EUS-FNA procedure revealed an enlarged RPLN with an axial diameter of 2.0cm on the right side of the retropharyngeal space. The RPLN was close to the carotid sheath, which contained the internal carotid artery and the internal jugular vein [3]. The mass was roughly round and homogeneously hypoechoic (Fig. 1d).

Under real-time EUS guidance, a dedicated 22-gauge aspiration needle (NA-201SX-4022; Olympus) was used to puncture the enlarged RPLN; the needle was then withdrawn under 10 mL of suction pressure (Fig. 1e). The obtained tissue samples were sent for pathological and cytological examination. This EUS-FNA procedure...
was repeated three times and lasted for a total of approximately 20 minutes [4]. The procedure of EUS-FNA of an RPLN is shown in Video 1. The EUS-FNA procedure was conducted smoothly without any severe complication, such as bleeding, subcutaneous emphysema, choking, dyspnea, extremity paralysis, or hemiplegia. The pathological result confirmed the presence of squamous cell metastases in the RPLN (Fig. 1f) [5].

Endoscopy_UCTN_Code_TTT_1AS_2AB

Competing interests: None

References