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Effective Detection of Laryngeal Foreign Bodies with 320-row Computed Tomography

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Clinical Image

A 77-year-old man with a history of type 2 diabetes presented with a 1-day history of sore throat. The patient reported that he had eaten fish for dinner one day before. On clinical examination, the patient reported difficulty in breathing. Laboratory tests revealed leukocytosis (12.9 × 109 white blood cells) and an elevated C-reactive protein level (2.51 mg/dL). Laryngeal fiberoscopy detected a foreign body on the epiglottic tubercle (Figure 1). As shown via multiplanar reformatting 320-row computed tomography (320-row CT) of the neck, the foreign body was a 5 cm long fish bone that penetrated the larynx (Figure 2). Intubation was difficult; hence, emergency intravenous anesthesia was administered to dislodge the fish bone transorally. The operation was completed successfully, and he was discharged from the hospital on postoperative day three.

Ingestion of a foreign body is one of the most common reasons for emergency otolaryngological consultation. Foreign bodies are most often located in the proximal esophagus (73.3%), followed by the larynx (8.9%), distal esophagus (8.3%), pharynx (8.3%), and oral cavity (1.2%) [1]. They are usually removed endoscopically [2] but sometimes lodge in areas that are difficult to access endoscopically. Foreign bodies on the epiglottic tubercle are rare, and their detection likely requires a more thorough examination than endoscopy; such examinations include 320-row CT [3], which helps in identifying the location of the foreign body.

We presented a case in which an ingested fish bone migrated into the larynx. Predicting the route, a foreign body might take after its ingestion is difficult. In our case, the presence of a fish bone in the larynx was made clear via 320-row CT. We believe that this technique can easily and effectively detect foreign bodies in the larynx.

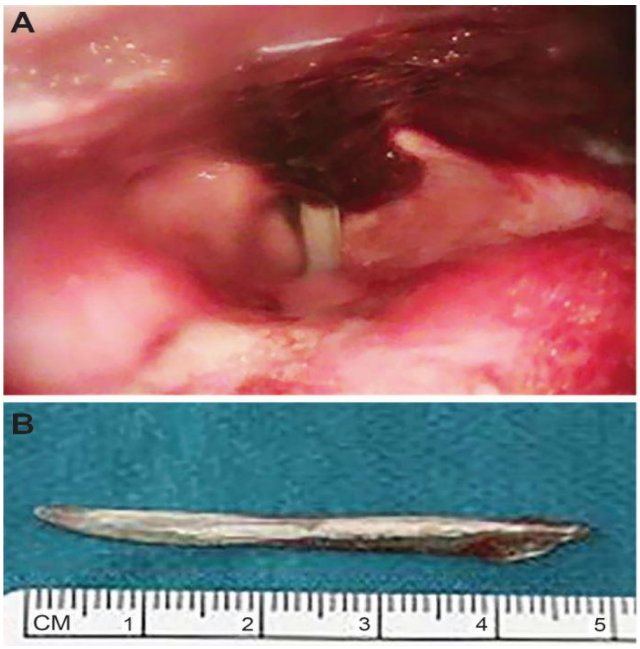

Figure 1: (A): Laryngeal fiberoscopy detected a foreign body on the epiglottic tubercle and bleeding in the posterior pharyngeal wall; **(B):** The foreign body was 5 cm in length.

Figure 2: Multiplanar reformatting computed tomography shows penetration of the larynx by the foreign body.

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