

Foreign body in mid-esophagus: a case report Foreign body in mid-esophagus

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Abstract: In this case, CT imaging helped to distinguish foreign body in mid-esophagus. The case involved a 66-year-old male patient who was seen as an outpatient symptom of being uncomfortable at the back of breastbone for 2 weeks. Preoperative gastroscopy and pathology revealed that a inflammatory small nodular hyperplasia on anterior wall of esophagus. After CT, Endoscopic dissection was carried out.

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1. Case report

A male patient, who named Jiang, 66 years old, came to our hospital on May 18th, 2010, with the symptom of being uncomfortable at the back of breastbone for 2 weeks. Two weeks ago, he came to the local hospital, where he was found several hyperplasia particles at the front-wall mucosa of the esophageal which was 27 cm from the foretooth under gastroscopy, which was considered as chronic inflammation of squamous esophageal mucosa. The hyperplasia was brittle and easy to bleed [Figure 1A]. Pathologically it was formed by chronic inflammation of esophageal mucosa and interstitial granulation tissue [Figure 1B]. The results of routine blood, blood clots analysis and electrocardiogram were all normal. On June 1th, he came here again with symptom of comorbid cough with phlegm. So the doctor intended to treat argon plasma coagulation (APC) to cure his esophageal lesion with endoscope. After inserting the endoscope, suddenly a black strip-like foreign body was found at the front-wall of the esophageal which was 27 cm from the foretooth [Figure 2A]. Was that the tracheoesophageal fistula in the mid-esophagus? After inspecting the breast with CT, it came two approaches: (1) consider it as common calcified lymph nodes between the two hilar and mediastinum, it should be treated by enhanced scanning if necessary; (2) consider it as the suspicious high-intensive shadow in the mid-esophageal wall [Figure 2B], and without obvious symptom of trachea and mediastinum fistula, it should be treated with clinical methods. After informed consent was obtained from the patient and his relatives, the operation was performed again to take out of the foreign body in digesting center, and it finally turned out to be successful [Figure 3]. The postoperative treatment was normal, and reexamined by gastroscopy three times on Nov 16th, 2010, May 26th, 2011, and Nov 17th, 2011. The reviewing results were ulcer scar was formed on the front-wall of

esophagus which was 27cm from the foretooth, and the around mucosa changed [Figure 4].

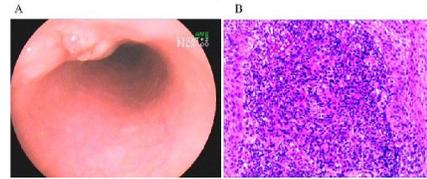


Figure 1 A: hyperplasia at the front-wall of esophagus; B: Forming of chronic inflammation of esophageal mucosa and interstitial granulation tissue (HE x10)

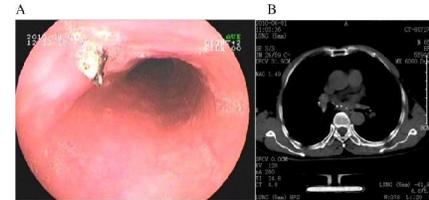


Figure 2 A: A black strip-like foreign body at the front-wall of the esophageal; B: CT shows the suspicious high-intensive shadow at the mid-esophageal wall

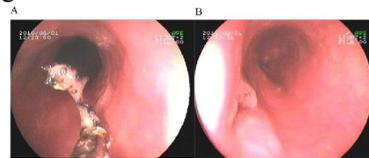


Figure 3 A: Foreign body taken out; B: wound after operation under endoscope



Figure 4 A: 6 months after operation under endoscope; B: one year after operation under endoscope; C: 18 months after operation under endoscope

2. Discussion

Due to the long duration, the foreign body was gradually wrapped by hyperplasia organs on esophageal mucosa, which was stimulated by trauma and reactive inflammation for a long time. During the previous two reexaminations by gastroscopy, the granulation tissue was failed to be seen and so was the foreign body. After destruction and treatment of the covered granulation tissue, it became scattered at local area, where the foreign body was finally seen. It has been reported that some cases which was the same situation as ours was falsely treated as esophageal cancer (Danny et al.,2006; Conners and Hadley 2005; Kirchner et al., 2011). It might be because the mid-end esophagus was controlled by plant nerve, and it was not sensitive to foreign bodies. So the patients came to hospital until granuloma was formed, and the diagnosis direction could be easily misled by the granuloma. For observing potential foreign bodies and judging their damage to esophageal wall, CT is the best approach at present time, due to its superior performance of high density resolution image (Catherine et al.,2008; Michael et al.,2003). If necessary, it can also use MSCT, MPR, MIP and VR, etc to improve the diagnosis results(Li 2010) . The author's opinion is that the possibility of foreign body wrapped by the esophageal mucosa should be considered when wound area of common nodular-type hyperplasia or uplift-type kitchen at mid-end of esophageal mucosa were observed, no matter whether the patient has a history of mistaking any foreign things, it should use CT scanning to check the wound

area and do further treatment if necessary. This approach will be good for patients, or at least can prevent misdiagnosis.

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