

peer reviewed CASE REPORT

Case report. Swallowed fishbone in an emergency setting and imaging findings

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Abstract

A 27-year-old woman was admitted to the emergency department after swallowing a fish bone while eating dinner. A lateral neck radiograph was performed and a fishbone was detected as a fairly-distinct linear radiopaque density in the pre-cervical soft tissues at the level of the C4/C5 vertebral bodies.

Keywords foreign body, soft tissue neck, x-ray

Case report

A 27-year-old woman was admitted to the emergency department of a private health-care facility. She presented five hours after swallowing a fishbone while eating dinner. She complained of severe pain due to the foreign body stuck in her mid-throat. Examination of her throat did not show any abnormality. No foreign body could be detected despite the presence of pain that made her restive. Soft tissue neck radiographs were requested. Digital anterior-posterior (AP) and soft tissue lateral views were taken. Unexpectedly, the fishbone was detected as a fairly-distinct linear radiopaque density of 18mm in length, at the level of the C4/C5 vertebral bodies (Figure 1). It was located posterior to the tracheal air column, in the pre-cervical soft tissues with a thin air column above it (oesophagus). No free air was noted around the linear density or within the pre-cervical soft tissues. The fishbone was removed, and she was discharged.

Discussion

Food-related items, such as fish and chicken bones, are more often ingested by older children and adults.^[1,2] An ingested fish bone could either be harmless or harmful.^[3] It may pass uneventfully through the gastrointestinal tract (GIT) as it is moved down by peristalsis. Being a sharp object, it may also be potentially dangerous; capable of perforating the digestive tract and surrounding organs including the heart, liver, spleen, and lungs.^[4]

Although plain soft tissue neck radiographs are not very useful for detecting fish

bones in the throat,^[3,4,5] they are frequently employed in the management of affected patients. This probably results from a combination of medicolegal considerations and the usual lack of a better alternative diagnostic tool or expertise in an emergency setting. A plain-film soft tissue neck is largely a poor choice to demonstrate a fishbone. Fish bones tend to be radiolucent and, as a result, many cases of a fishbone stuck in the neck are not visualised on radiographs.^[5] However, this case was an exceptional one. Soft tissue imaging clearly showed a well-delineated fishbone stuck in the upper oesophagus.

The patient in this case report was fortunate in that the fishbone did not penetrate more vital tissue or structures. The intraluminal pressure in the oesophagus may force a transverse or oblique positioned sharp foreign body through the wall of the gut. Routine soft tissue radiographs do not always help detect a relatively delicate object such as a fishbone,^[4] thus the clinicians were not exactly expecting to locate the foreign body. They requested the radiological investigation to rule out important complications that can be caused by swallowed foreign bodies, namely pharyngeal or oesophageal perforation.



Figure 1. Lateral soft tissue neck radiograph showing the fish bone (arrow) as a fairly-distinct linear 18mm radiopaque density in the upper oesophagus at the level of the C4/C5 vertebral bodies. Free air is not evident.

Conclusion

Although the value of routine radiography in the detection of delicate foreign bodies has been heavily debated, it still remains an important frontline diagnostic tool used in the preliminary assessment of delicate foreign bodies and their attendant complications in an emergency setting.

Competing interests

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