

The Radiological Appearance of Chicken Bones

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SUMMARY

Observations over a period of years have led me to the conclusion that chicken bones have a typical radiological appearance in that they are hollow bones with wide medullary cavities and thin cortices.

The bones of the toes look exactly like human phalanges and in cases with ingestion or inhalation of these one can be even more specific. In the latter the problem of confusion with dermoids sometimes arises.

S. Afr. Med. J., 48, 1381 (1974).

Some years ago I came across a child admitted to hospital with a mass over the pelvis. Plain radiographs showed a possible dermoid containing what appeared to be phalanges. A barium enema was attempted, but the rectum was overloaded and it was impossible to insert a tube. Removal of the rectal content yielded numerous chicken bones.

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At a later date a plain radiograph of the abdomen of a patient sent for excretory urography showed a similar picture, and again the diagnosis of dermoid was entertained. By the time the last radiograph had been done the opacities had changed in position, and instead of being in a clump, had spread out. They were obviously in the bowel and the patient eventually passed some chicken bones.

I have since seen and diagnosed the presence of chicken bones in numerous cases. The appearances are quite diagnostic. Chicken bones are bird bones and therefore hollow, with a wide medullary cavity and thin cortex. The toes have the appearance of phalanges (Fig. 1).

CASE REPORTS

Case 1

A female child aged 2 years was admitted to hospital with acute dyspnoea. A chest radiograph (Fig. 2) showed a foreign body in the left main bronchus. The appearance resembled that of a finger phalanx and a confident diagnosis of an inhaled chicken bone was made. The thoracic surgeons duly removed a chicken bone.



Fig. 1. Left: typical appearance of chicken bones with thin cortices and wide medullary cavities. Right: the bones of the feet are similar to human phalanges.

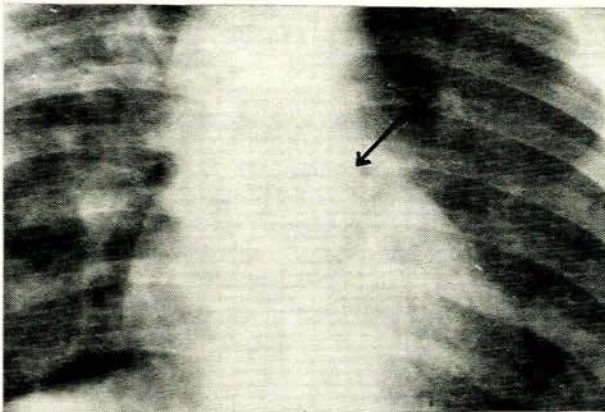


Fig. 2. A chicken bone resembling a human phalanx is seen in the left main bronchus.

Case 2

An adult male aged 30 years was admitted to hospital, having swallowed a foreign body. A radiograph of the



Fig. 3. A small chicken bone is lodged in the throat. There is a large soft-tissue swelling containing air, owing to perforation and abscess formation.

throat (Fig. 3) showed an opaque object which was thought to be a chicken bone. In addition there was soft-tissue swelling at C5-6-7 level, with anterior displacement of the trachea as well as the appearance of air in the surrounding soft tissue. The findings were attributed to perforation and an opaque medium swallow (Fig. 4) confirmed the presence of a fistula.

At operation a large impacted bolus of chicken meat containing a small sharp bone was removed immediately distal to the crico-oesophageal sphincter. There was surrounding abscess formation.

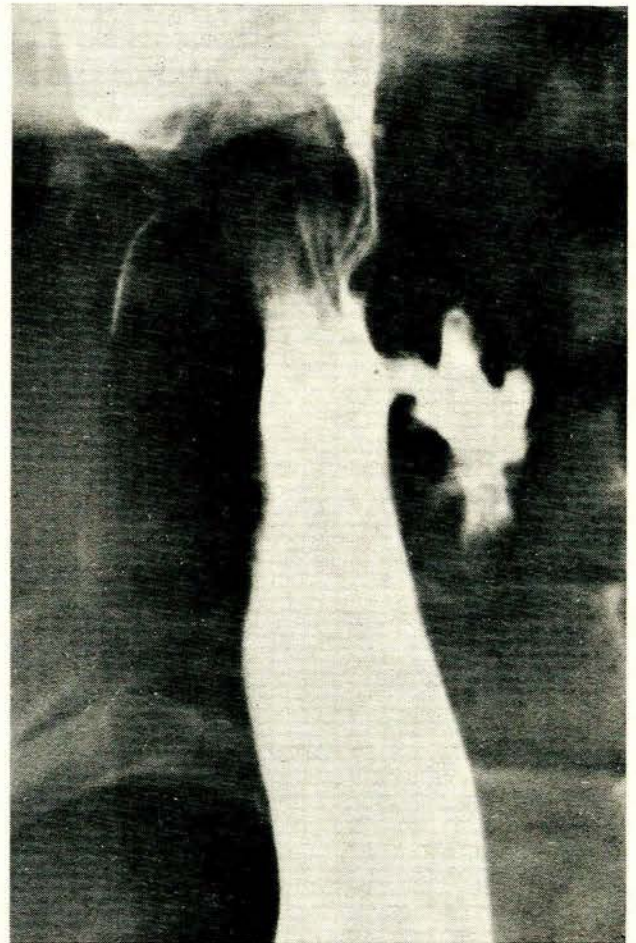


Fig. 4. Fistula outlined with opaque medium.

CONCLUSIONS

Chicken bones have a characteristic X-ray appearance. The majority of chicken bones demonstrated in these patients were similar to human hand phalanges.

Supermarkets sell bundles of poultry feet as cheap meat and this is a popular source of food for the lower income groups, especially as a delicacy for children.

The question of differential diagnosis with dermoid cysts may arise.