

## AN UNUSUAL CASE OF CONGENITAL OESOPHAGEAL ATRESIA

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(RECEIVED FOR PUBLICATION MAY 22, 1954)

Atresia of the oesophagus, which has been widely discussed within the last ten years, has been intrathoracic and the site of the atresia has been at or just above the level of the tracheal bifurcation (Haight and Towsley, 1943; Haight, 1948; Franklin, 1949; Gross, 1953; Borrie, 1953). Our case is unusual because the site of the tracheal oesophageal communication is in the neck and the surgical approach was quite different to the ordinary oesophageal atresia.

### CASE HISTORY

Baby H. B. was admitted to the Children's Department of this hospital on January 24, 31 hours after birth,

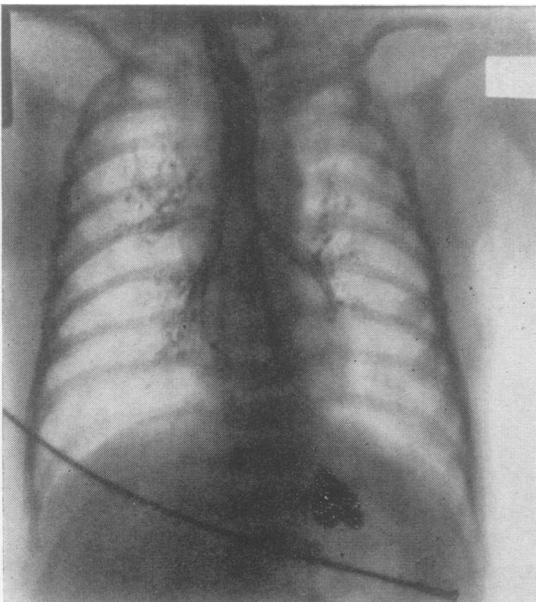


FIG. 1

which took place at home. He was cyanosed and had started cyanotic attacks after his first feed at home early in the morning of admission. According to the parents' statement the baby was able to keep some of the food down without difficulty. The baby was transferred to this unit while he was slightly dehydrated and not in very good shape. An oesophageal tube was introduced without difficulty and a few millilitres of lipiodol were injected under the x-ray screen.

As soon as the lipiodol entered the oesophagus beyond the catheter very strong peristalsis started in the oesophagus and regurgitated lipiodol into the bronchial tree (Fig. 1). This examination was not very conclusive of tracheo-oesophageal fistula. The examination was repeated on January 26. This time the catheter did not go farther than a few inches and lipiodol was injected and a radiograph was taken which showed a clear communication between the oesophagus and trachea at the level of the seventh cervical vertebral body (Figs. 2, 3, and 4).

On January 26 after resuscitation a collar incision which centred at the junction of the middle and inner thirds of the left clavicle was made. The left sternomastoid muscle was divided at its insertion on the clavicle. The main vessels were retracted laterally and the trachea was identified and its communication with the oesophagus was discovered and divided, and the defects of the two organs were stitched separately with interrupted stitches and a catheter passed through the oesophagus down to the stomach. The suture lines were drained through the neck incision.

On the third day after the operation the drain was removed and the oesophageal tube was withdrawn and the baby was fed orally. On January 30 there was some discharge from the wound and by the end of the day it was mainly milk, which indicated an oesophageal fistula. An oesophageal catheter was re-introduced on the same day and the child was fed through this. The baby was gradually improving, but on February 11, after night

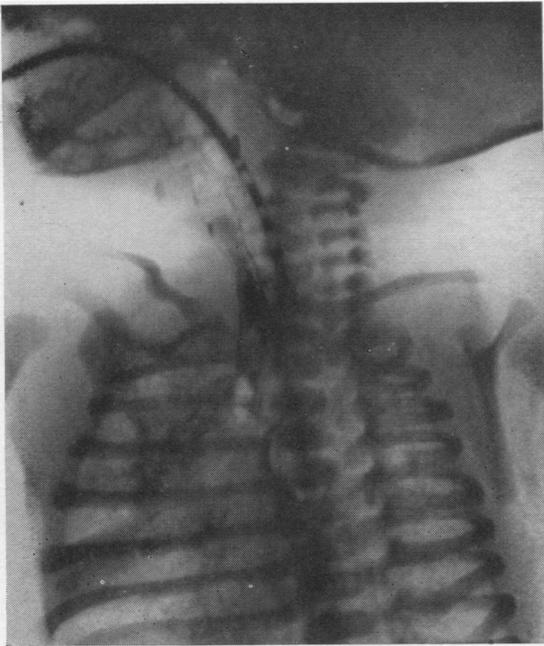


FIG. 2

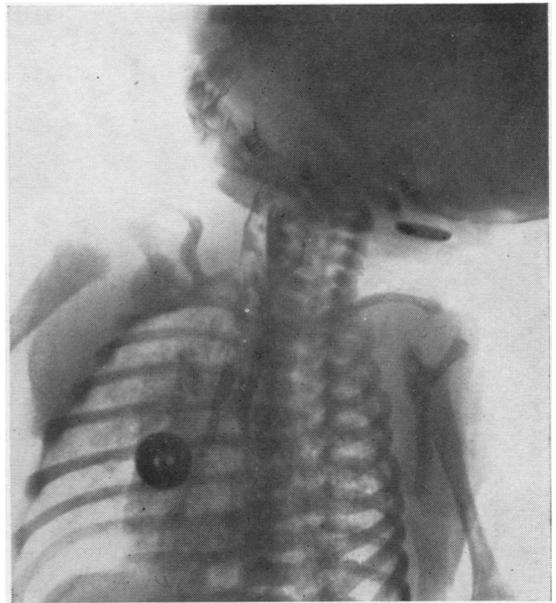


FIG. 3

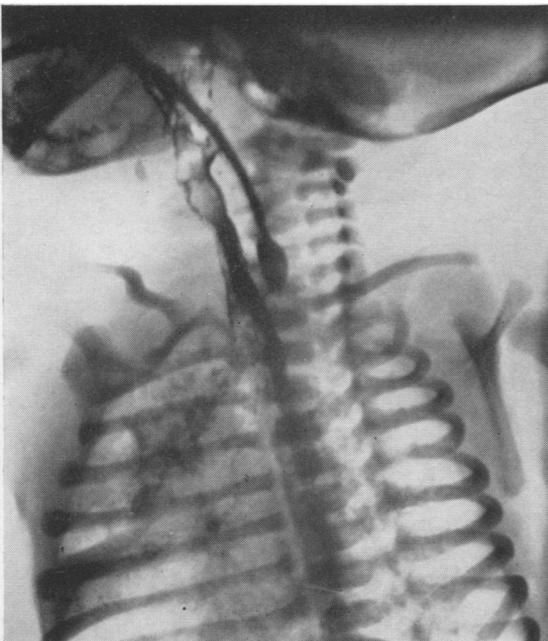
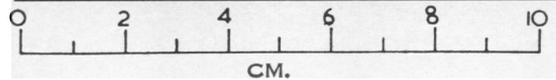
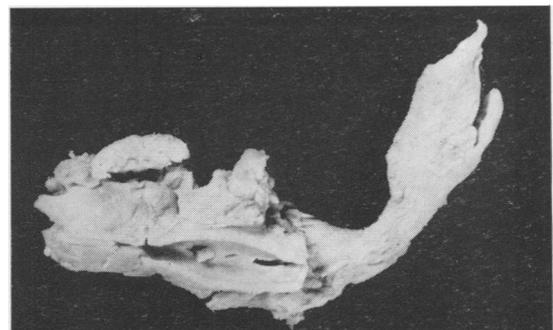
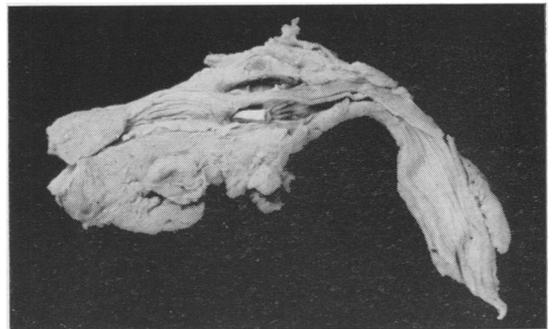


FIG. 4



FIGS. 5 and 6

feeding, the child went into a cyanotic attack from which he died.

The cause of death was bronchopneumonia precipitated by the reappearance of tracheo-oesophageal fistula.

The post-mortem specimen showed that the fistula was situated  $\frac{1}{2}$  cm. below the cricoid cartilage on the second ring of trachea (Figs. 5 and 6).

Although congenital tracheo-oesophageal fistula is a rare type of congenital oesophageal atresia the reported cases in the literature have all been at or just above the tracheal bifurcation. The current literature has been reviewed and a similar case has not been reported.

The findings of this case suggest that tracheo-oesophageal fistula may occur at any site between the level of the cricoid cartilage and the bifurcation of the trachea.

#### SUMMARY

A case of tracheo-oesophageal fistula  $\frac{1}{2}$  cm. below the level of cricoid cartilage in a newly born baby is described. This was treated surgically, but suture lines broke down later.

No previous case of this kind has been reported in the available literature.

I am indebted to Mr. R. C. Barclay, under whose care this patient was admitted, and to Dr. A. P. M. Page, from whom the patient was referred.

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