Accessory bronchi arising from the trachea are rare in man (Boyden, 1955) but common in lower animals (McEwen, 1937). When present they commonly arise from the right side of the trachea, approximately 2 cm. above the origin of the right main bronchus (Brock, 1954).

Accessory bronchi may be displaced normal branches or true supernumerary bronchi (Foster-Carter, 1946). In the former the accessory bronchus takes the place of the normal bronchus (the apical branch of the right upper lobe) arising from the trachea rather than from the right main bronchus. The right main bronchus therefore divides into only two terminal branches instead of three. True supernumerary bronchi are rare and can only be diagnosed by demonstrating the normal segmental bronchus in addition to the supernumerary bronchus. The distinction is of importance where surgery is contemplated.

Other abnormalities may also occur in the region of the right upper lobe. Thus the right upper lobe bronchus may arise from the trachea and not from the right main bronchus (Williot, 1958). An abnormal bronchus arising from the trachea and dividing into apical and anterior segmental branches to the right upper lobe has been described (Franchel, Merlier, Morelec, and Polsvert, 1955, Case 2). In this case the right upper lobe bronchus was narrower than usual.

Diverticula must be distinguished from aberrant bronchi, and the classification of Morel, Madray, Laysol, and Coll (1957) emphasizes this. They distinguish (1) true accessory lung with three lobes; (2) supernumerary lobe, as described here; (3) displaced apical segmental bronchus; (4) cul-de-sac or diverticulum; (5) a communication with a cystic, degenerative region.

The last two are acquired lesions. Type 5 is in many cases probably the result of a pulmonary lesion which has tracked into the trachea, while the true diverticulum (Type 4) develops from the trachea itself.
Figs. 1A and 1B.—Postero-anterior and right lateral radiographs on admission.

Figs. 2A and 2B.—Bronchograms showing abnormal bronchus and dye in a cavity persisting after the infection has subsided.

Fig. 3.—Detail showing abnormal bronchus arising from the trachea and the right upper lobe bronchus with its branches.
in the lungs. Supernumerary bronchi can only be diagnosed by procedures which are unlikely to be performed in patients with healthy lungs, and therefore one would expect the cases reported to have some pulmonary disease giving rise to symptoms or signs. That the condition may be unsuspected is certain. Inada and Kishimoto (1957) describe a case with infection in the middle lobe necessitating surgery, the supernumerary bronchus being an unexpected finding at operation. Dybicki, Bochinski, and Dworak (1958) describe a case with widespread cavernous tuberculosis.

Brock (1954), Gerson and Rothstein (1951), and Foster-Carter (1946) describe further cases in which the extra segment showed no evidence of bronchiectasis.

Other congenital anomalies are not usually present but may occur as in one case mentioned by Brock (1954).

SUMMARY

A case of a true supernumerary bronchus which presented with infection confined to the congenitally abnormal segment is described, and the literature reviewed.

I would like to thank Dr. V. E. Lloyd Hart under whose care the patient was admitted, and also Dr. Stephen Hall for his help.

REFERENCES

Supernumerary Tracheal Bronchus

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