CASE SHOWN AT THE F.R.C.S. CLASS.

Neuro-Fibroma of the Brachial Plexus.

R.S., a female, aged 34 years, was referred by Dr. E. C. Warner and admitted to Charing Cross Hospital on October 17th, 1934.

History of present illness : Eighteen months ago she first noticed a painless lump above the left clavicle. It was about the size of a chestnut and had not increased in size since that time. Three months ago she began to have pain in the left shoulder which spread over the spine of the scapula and deltoid region and also down the outer side of the arm as far as the elbow. This pain was intermittent, usually aching in character, but occasionally it was sharp. It was not made worse by using the arm. She felt generally weak and lifeless, nervy, and was always sleepy. Appetite very poor. Bowels—obstinate constipation. Micturition normal. Had lost $1\frac{1}{2}$ stones in weight in the last three years.

Previous History : Nothing relevant.

Family History : No tuberculosis.

Examination : Temperature and pulse normal.

Neck.—A firm, smooth, slightly oval swelling with the long axis running downwards and outwards, is situated in the left supraclavicular triangle just to the outer side of the sterno-mastoid muscle. It is close to the upper border of the clavicle but does not extend deep to this bone. It is not attached to the skin, is non-translucent and is non-fluctuant.

Relation to deep structures.—The swelling can be moved upwards and outwards, and downwards and inwards, but not in the direction at right angles to this. Roughly, it can be moved transversely, but not vertically. There is neither local nor referred pain on palpation. No other swellings can be felt on either side of the neck. The pupils are equal and react normally to light and on accommodation.

Mouth.—Nothing abnormal detected. Teeth are in good order.

Breasts and axillæ.—Normal.

Left chest moves less than the right, but otherwise nothing abnormal detected.

Abdomen.—Nothing abnormal felt. Liver and spleen not enlarged.

Rectal examination.—Nothing abnormal found.

Urine.—No abnormal constituents.

Special investigations :

1. **Radiogram** of neck and chest.—Normal; no calcification in the tumour; no cervical rib.
2. **Wassermann reaction.**—Negative.

Clinical Diagnosis :

Neuro-fibroma of Brachial Plexus.

? Tuberculous gland.

Operation : October 19th, 1934.

Anæsthesia induced by intra-tracheal gas, oxygen and ether.

Transverse incision above clavicle with slight convexity downwards. Superficial veins ligated and divided. An artery, the transverse cervical or the supra-scapular, was seen running transversely across the tumour—it was ligated and divided. The tumour was found to be in intimate relationship to the lower trunk of the brachial plexus. A small communicating branch believed to be the posterior division of this trunk passed over the surface of the tumour and was closely adherent to its capsule. It was found impossible to enucleate the tumour without division of this branch. The tumour was lying in front of the lower trunk which could be seen passing behind it above, and emerging from it below. It was enclosed in a dense fibrous capsule continuous with the sheath of the trunk. This was incised in the direction of the trunk and the tumour readily enucleated. The trunk behind appeared normal but was obscured by the capsule. This latter was sutured and the wound closed in layers with a small corrugated rubber drain at the posterior angle.

Macroscopic appearance of Tumour : Slightly lobulated, rounded smooth tumour, firm in consistency. On section—appearance unlike that of a simple fibroma. There were no whorls. The tumour tissue was of a yellowish-grey colour and homogeneous. It appeared to be somewhat fatty in composition with fine fibrous trabeculation.

Microscopic appearance : “The tumour is a neuro-fibroma, on the whole of simple structure and with well-differentiated cells. In some areas the cell nuclei tend to be rather large and somewhat irregular, but beyond this there is no definite evidence of any malignant characters.”

Subsequent Progress.

Three days after operation the patient complained of “tingling” over the radial side of the forearm, hand and thumb. A day later this had extended to the lateral side of the arm and to the spine of the scapula. There was also some weakness of the left grip.

She was seen again on February 1st, 1935, when “tingling” over the radial side of the forearm was still complained of, but she had had no more attacks of pain and the power of the grip had greatly improved.

Comment.

Most of the candidates made a correct diagnosis. The sign of lateral but no vertical movement of the tumour was the key to the diagnosis.

Case presented by A. CAMERON MACLEOD, F.R.C.S.