

and thumb of the right hand, especially when she attempted to use her hand to grasp any object. The hand always felt colder but never became blue. It was more sensitive to knocks, etc., than the other hand. Wasting of the muscles was first noticed six months ago; and when her last child was born, four months ago, there was an exacerbation of all symptoms.

Patient has had a cough for about two years; pleurisy seven years ago; a small hæmoptysis last winter; pneumonia 22 months ago. Patient has been married four years, three children and two miscarriages. There is a family history of tuberculosis.

*On examination:* Cerebral functions normal. She has a bi-lateral apical lesion, tuberculous in nature, and the apex of the lower lobe is also affected on the right side. The cranial nerves are normal, though occasionally the right pupil has appeared a shade larger than the left; both react to light and accommodation.

*Muscular System:* There is wasting of the forearm muscles on the ulnar side of the flexor surface; two and a half inches below the internal condyle the circumference of the right arm is a quarter of an inch smaller than the left. There is also wasting of the small muscles of the thumb, the muscles of the hypothenar eminence, and the dorsal and palmar interossei. See figures. There is relative weakness in extension and flexion of the wrist and in ulnar flexion. In flexion of the fingers to make a fist there is weakness, especially marked in the index finger. Abduction and opposition of the thumb are practically nil; flexion of the thumb is weak. There is marked weakness in adduction and abduction of the various fingers, not so marked weakness in extending the distal phalanges on the semi-flexed proximal ones.

*Sensory system:* Subjective pain as already described. Objectively there is an area of analgesia and anæsthesia on the ulnar side of the forearm extending over the 5th and the ulnar half of the 4th finger. See figures. The reflexes are all normal.

There is no spinal curvature. No inequality of the pulse on deep inspiration. To faradism none of the small muscles of the thumb react; reaction is absent also in the interossei and in the flexor profundus digitorum and diminished in the flexor carpi ulnaris and the abductor minimi digiti. The other muscles react normally.

The skiagraph shows bilateral cervical ribs. See illustration. Of course the objection is inevitable that here pleuritic adhesions may have involved the lower roots of the brachial plexus, but I think this may be disregarded; first, on account of the great similarity in the history and the sensory and motor paralysis between this case and the cases I have