external genitalia are duplicated too, whilst others use it in cases in which duplication is incomplete.

The association of congenital abnormalities in other systems with defects in the genital tract has been commented on by many authors and was recently emphasized by Burton-Brown (1948). In particular, various developmental errors are to be found in the urinary organs—a fact which is not surprising, bearing in mind that the genital and urinary organs are so closely associated in their development.

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Medical Memoranda

Traumatic Amputation of the Upper Limb

The following case of avulsion of the upper limb is interesting enough to be placed on record.

CASE REPORT

A Civil Servant aged 26 was driving his motor-cycle on December 1, 1948, when he ran into the back of a vehicle carrying tree trunks and sustained almost complete avulsion of his upper limb and compound fracture of his right tibia and fibula. He was admitted to the Edgware General Hospital at 9.45 a.m. in a very shocked condition. A little blood was coming from a large wound in the right axilla. The arm was cold and there was no radial pulse. The right leg was externally rotated and markedly shortened.

A blood transfusion was given and he was taken to the theatre at 6.30 p.m.

On exploring the large axillary wound it was found that the arm was connected to the body by skin and a few shreds of muscle of the posterior axillary wall. The exposed muscles of the limb were blackened and oedematous. The axillary vessels, which were found to be torn across but not bleeding, were ligated. When the amputation was completed it was found that the glenoid fossa had come away with the arm. The skin flaps were trimmed and the wound closed with

Photograph taken after the wound had healed.

drainage. The fractured right leg was reduced and enclosed in plaster-of-Paris.

The patient made a slow but steady recovery and was discharged on January 29, 1949. The accompanying photograph shows the final result.

Several cases were mentioned by Paul Berger in his *Amputation Interscapulo-thoracique* published in 1887, among them that originally recorded by W. Cheseldon in *The Anatomy of the Human Body* in 1756, concerning a miller, Samuel Wood, whose right arm was torn off when caught in the machinery of his mill. References to other cases in which the arm was torn off with or without the scapula are given below.

I am grateful to Mr. D. B. Craig for permission to publish this case.

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Unilateral Spinal Accessory Nerve Palsy caused by an Arm Sling

Spillane (1949) draws attention to the problem of the aetiology of unilateral spinal accessory nerve palsy. The following case may throw light on the causation of the palsy in some instances.

CASE REPORT

A man aged 29 slipped and fell while running over mud during the monsoon in India, the right arm being violently extended above the head in falling. The greater tuberosity of the right humerus was fractured, but as the position of the fragments was satisfactory the arm was immobilized only by means of a large arm sling and he continued his duties. After wearing the sling for six days the left shoulder, which bore much of the weight of the injured right arm, became sore.

The sling was worn intermittently for another nine days and was then discarded on account of a now persistent ache in the left shoulder, while the injured right shoulder was relatively comfortable. The aching in the left shoulder became more pronounced during the succeeding six days and then it suddenly became agonizing. The pain was present over the left side of the neck; it limited movement of the head and prevented sleep for two nights. At the time the condition was thought to be an attack of fibrositis. The pain diminished over the course of the next three to four days, but weakness of the left shoulder was now experienced. An ache in the shoulder remained, and this was aggravated by exercise. Any lifting, and even such acts as carrying a medium-sized book in the left hand or walking with the arm by the side, caused aching and made the patient conscious of weakness of the limb.

Wasting of the upper portion of the left trapezius was first noted two weeks after the so-called attack of fibrositis, and four weeks after this attack the trapezius had become "paper thin," the left shoulder had dropped 2 in. (5 cm.), and there was winging of the scapula, which at the same time was rotated so that the axillary border was nearly horizontal. It was impossible to raise the abducted arm above shoulder level. No wasting of the sterno-mastoid or other muscles became apparent and there were no sensory changes.

The patient continued to lead an active life; he found it more comfortable, however, to walk with the left hand on the hip or tucked inside the buttoned jacket so as to take some of the weight off the affected shoulder. The weakness of the shoulder gradually diminished, and four months after the "fibrositic" attack there was some noticeable increase in size of the left trapezius muscle, though pronounced wasting was still apparent on comparison with the opposite side. The inequality of the two muscles remained, though in diminishing degree, until 11 months after the "fibrositic" attack, by which