45 mg. per 100 c.cm.; Wassermann reaction negative. Recovery from the facial palsy was rapid, being complete within a month. In the arms it was slower, but tendon reflexes were present in three weeks and normal in four. The legs were slowest of all, and convalescence was attended by much aching in the feet. After nine weeks the lower-limb reflexes could be obtained, with the exception of the left ankle-jerk. By 11 weeks he was walking well with the aid of a stick, and shortly afterwards was transferred for rehabilitation. All tendon reflexes had returned by this time, but there was residual weakness of the glutei and calf muscles, with still a little pain in the feet. *

Discussion

A description of this condition, with post-mortem findings, was given by Gordon Holmes (1917) under Osler's diagnosis of acute febrile polyneuritis. A more detailed account, based on 30 cases, was published by Bradford, Bashford, and Wilson (1919). Transmission of the disease to monkeys from post-mortem material is described and its infectious origin held to be established. Hence the term "acute infective polyneuritis," which has since been commonly used. In the present war a group of 7 cases has been described by Barber (1940) under the title "Polyradiculoneuritis (Guillain-Barré Syndrome)," which he gives reasons for considering the same as Holmes's. From the descriptions this would appear reasonable, though Guillain (1936), writing 20 years after his original publication, still wished to draw a distinction between the syndrome known by his name and the type characterized by fever. The eponym, much used by French writers, pays tribute to his work on the subject. American authors have added other series in recent years. Forster, Brown, and Merritt (1941) describe 26 similar cases as "polyneuritis with facial diplegia," although facial involvement was not a constant feature, being lacking in four patients. They point out incidentally that their cases showed a much worse prognosis than is usually given, 11 ending fatally, and suggest that an increase in virulence of the hypothetical causative virus occurred at one period of their survey. An interesting possibility that has often been discussed is that Landry's paralysis is a form of the disease under consideration (Pinckney, 1936; Garvey and Slavin, 1938). A long list of synonyms is given in the recent editions of Osler's *Medicine*.

The importance of establishing the diagnosis is not entirely academic, in spite of our ignorance of the aetiology and the specific therapy. Cases are often labelled anterior poliomyelitis, and a much more serious prognosis given as regards paralysis than is warranted. On the other hand, failure to appreciate the possibility of involvement of the respiratory muscles may assist in fatal consequences. Points of differential diagnosis in poliomyelitis are given by Gordon Holmes as "the more rapid evolution and the more irregular distribution of the palsy, the frequent paralysis of the trunk muscles, and the usual absence of objective sensory symptoms in this disease." It is also generally agreed that in the polyneuritis there is usually a considerable interval between the febrile episode, which may mark the onset of the illness, and the appearance of the characteristic symptoms. Recovery, too, tends to be complete. The C.S.F. findings show in polyneuritis an increase of cells—an acellular albuminosis, as it has been called. This was not marked in the present case, but the sample was obtained very early. I have usually noted higher figures for protein in civilian cases, which come to hospital at a later stage of the disease. On the other hand, seven of Forster, Brown, and Merritt's cases had protein within normal limits, and they find that this cannot be explained on a time basis.

This case was apparently a sporadic one, and no evidence of a local epidemic has been found.

My thanks are due to the Air Ministry for permission to submit this note.

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S. J. Carter (*Ann. Surg.*, 1945, **122**, 117), who records eleven illustrative cases, maintains that serum amylase determination should be made in all chronic alcoholic patients if operation is contemplated for severe acute abdominal symptoms.

Medical Memoranda

Misleading Evidence in Establishing the Time of Death

The rate of emptying of the stomach is considered a useful if subsidiary means of establishing the time of death in medico-legal cases. The following case presents unusual features in this connexion.

CASE RECORD

The dead body of a soldier aged 26 was admitted to the mortuary of a military hospital in the M.E.F. He had sustained severe head injuries when the truck which he was driving overturned, and he died 13 minutes later without recovering consciousness. The body was placed in the mortuary refrigerator 4 hours after death, and the necropsy was performed 14 hours later.

The face and forehead were gashed and abraded, and the left maxilla driven backwards, with depression of the floor of the left orbit, indicating a severe blow on the face. The skull was widely comminuted and the undersurface of the brain lacerated. On section, the mid-brain was peppered with small perivascular haemorrhages and the ventricular fluid was heavily blood-stained. The lungs contained a quantity of blood inhaled from the nasopharynx. A small tear was found in the liver, and the pelvis was fractured.

The stomach was empty; but, lying free in the jejunum, 12 inches below the duodeno-jejunal flexure, was a vulcanite denture with 8 jagged points round the convex border, and bearing one artificial tooth. Its shape was roughly triangular, the base 38 mm., the altitude 25 mm., and it was curved to fit the hard palate. Passage of the denture appeared to have caused no injury to the food channels.

COMMENT

Subsequent interrogation of a companion in the truck disposed of the idea that the deceased had swallowed his denture before the accident, and it is reasonably certain that it was dislodged at the time of the facial injury. It would appear that the denture had then been swallowed while the patient was unconscious, and passed through the oesophagus, stomach, and duodenum into the jejunum, travelling 45 inches from its original position in the mouth in the course of 13 minutes.

Sydney Smith in his *Forensic Medicine* states that after a full meal food begins to leave the stomach in 15 minutes, and that the stomach is empty in 2 to 5 hours; that a barium meal passes through the stomach almost at once, but that metallic foreign bodies may be retained in the stomach for days; and that food travels through the small intestine at the rate of about 6 feet in an hour.

The surprising distance travelled by the denture may have been due to accelerated peristalsis during life or persistent peristalsis after death; but, in either case, had the time of death been unknown the evidence of the denture would have proved misleading.

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Scabies and D.D.T.

The success of D.D.T. in preventing infection by lice has caused many people to wonder whether it has any effect on scabies. There is little information about this. Buxton (1945) in his excellent account of D.D.T. does not mention scabies, but in the discussion of his paper K. Mellanby says—"D.D.T. is certainly not to be recommended for the treatment of scabies." To determine whether D.D.T. has any prophylactic action against scabies, I examined, in conjunction with Major G. A. Hodgson, a series of infected soldiers to see how many had been wearing impregnated shirts or had been using D.D.T. powder regularly and recently; "recently" was interpreted as being within the last two months. We obtained the following results:

	Scabies Patients			Controls		
	Cases	Yes	No	Cases	Yes	No
G. A. H. ..	48	23 (48%)	25 (52%)	111	46 (41%)	65 (59%)
F. F. H. ..	52	29 (56%)	23 (44%)	100	64	36
Total ..	100	52%	48%	211	110 (52.2%)	101 (47.8%)

("Yes" signifies wearing an impregnated shirt and/or having used D.D.T. powder regularly within the last two months.)

The difference between the proportions protected in the two series is due to their having been observed, purposely, in two different areas. The almost exact identity between the scabies patients and the controls shows that D.D.T. has no preventive action against the acquirement of scabies.

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