A Suggested National Scheme

Any such scheme should be run by the general practitioners. In Detroit the school medical service sent school children to their family doctors for periodic examinations, 37,348 being sent in 3 years, and Shurley (1937) reports that it is intended to make this a routine procedure. The examinations should be routine, and preferably more than one doctor should be present, so that each acts as a check on the other to ensure that the work is well done. A consultant should be readily available. Practitioners should be adequately paid for their services, and nurses and clerical staff should relieve them of routine duties. They should be able to work in groups and at suitably arranged health centres, and postgraduate study should be insisted upon. The health centre should provide routine laboratory and x-ray facilities with specialist assistance for interpreting radiographs. The emphasis should be on abundant vitality as the normal state, and the general practitioner should be in a position also to observe the usual mode of life of the individual; as the Peckham group express it—his reaction to his environment.

The treatment of the sick (private and panel practice) should be carried out at the same centre, which might well be a part of the community centre of an estate, closely associated with its recreational facilities. Adequate records should be kept and duplicates sent to a central statistical bureau, which would be able to provide morbidity statistics, and, by correlating early symptoms with later events, facilitate early diagnosis. This advance in medicine is especially desirable in connexion, for instance, with cancer of the stomach. It may be that conditions such as Paget's disease and the aetiology of juvenile spondylitis might become better understood.

The national identity cards would provide a suitable basis for classification and making contact with individuals. It would be necessary to see that future generations of practitioners were taught the routine and value of periodic examinations. The public should be induced to come voluntarily, and taught through the Press, the wireless, and lectures to realize the importance to their children, themselves, and the nation of such examination. It is suggested that the present civil defence services, the Home Guard, first-aid parties, and schools and universities offer a method of rapid and wide diffusion of such instruction. The frequency of the examinations would be dictated at first by the limits of practicability, but even an examination every 3 years has been shown to be of considerable value. Irregular spacing might be found with experience to be best. It is considered, for instance, that during the first year of life (Peterman, 1937) very frequent examinations are desirable, and between the ages of 5 and 15 fewer may be necessary than later.

As a safeguard against the breakdown of a national scheme through practical difficulties, experiments could be conducted in which medical, administrative, and financial experience could be gained. Two types suggest themselves: (1) An experiment on an estate of about 5,000 people. This would be relatively inexpensive and capable of control because of the ease of contact between doctors and the public. It would provide useful information of the detailed working of individual health units. It could precede (2) an experiment for a large city. This would require a considerable organization, and mistakes might be relatively costly unless the preliminary experiment had been carried out. It would provide enough information to run a national scheme perfectly, but would have to be conducted by the Ministry of Health, probably through the local authority.

That the idea of periodic examination has an appeal even without knowledge of all the foregoing evidence is shown by the fact that a group of doctors on an estate in Sheffield are eager to carry out the first experiment. The success of the school medical service, with its necessarily rather perfunctory examinations, in improving the health of school children in this country is an argument for periodic examinations. With such a scheme should go some form of adequate social insurance as recommended in the Medical Planning Commission's report. The possibility of neuroses being caused by such examinations may influence the opinion of practitioners. Faught (1939), Sensenich (1938), Fisk and Crawford (1927), and Pokorny (1940) state specifically, however, as a result of

experience, that neurotics are fewer rather than increased in number. It seems reasonable to suppose that children, if examined at regular intervals, would grow up as unconcerned at the prospect of a medical examination as they are of the dentist's chair, occupied at regular intervals.

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Medical Memoranda

Congenital Diverticulum of the Common Bile Duct

This condition, sometimes called cystic dilatation of the common bile duct, is so rare (less than 100 cases have been reported) that any case of it is worthy of record. The pathology, aetiology, and variations in symptomatology, as well as the literature, have been fully considered by Sir James Walton (*Brit. J. Surg.*, 1939, 27, 295).

CASE REPORT

The patient was a married woman aged 39. In her medical history there was nothing to suggest disease of the gall-bladder or bile ducts. She had, in fact, been remarkably free from illness of any kind. It should be noted that her first pregnancy terminated in Caesarean section three months before her admission to hospital. Ten days before admission she developed a severe colicky pain in the right hypochondrium, radiating through to the back and up to the right shoulder. On account of this pain she was admitted to hospital under the care of Mr. J. E. Paterson.

Examination revealed tenderness and guarding over the gall-bladder region. The liver edge could not be felt, and there was no palpable swelling. She was not, and never had been, jaundiced. Vomiting did not occur. There was no rise of temperature. A diagnosis of gall-stone colic was made, and an x-ray examination carried out. "Straight" x-ray films gave negative results, and cholecystography showed no evidence of gall-bladder shadow. The clinical diagnosis was considered to be substantiated and operation was advised.

At operation the gall-bladder was found to be healthy in appearance and of normal size. The first and second parts of the duodenum were lifted forwards and pushed down to the left by a large cystic swelling. This swelling, covered by peritoneum, was somewhat pear-shaped. The upper narrow portion extended up to the portal fissure lying in the gastro-hepatic omentum. About 1½ in. above the duodenum the cyst became more globular and measured some 4 in. in diameter. It extended down behind the first and second parts of the duodenum almost to the ampulla of Vater. The right border was definite and rounded, and extended beyond the limits of the duodenum. The left border was indefinite. Aspiration through a fine needle proved that the cyst contained pale-green bile in which there was a fair amount of mucus. There was no gross sepsis of the contents. The cyst was gradually decompressed by aspiration, but even when empty it did not collapse completely owing to the fibrous nature of its walls. No obvious obstruction to the duct was found.

A two-layer anastomosis between the cyst and the second part of the duodenum was made and the suture line reinforced with an omental graft. A drain was inserted into Morison's

pouch. Leakage did not occur, and the patient made an uneventful recovery. When seen ten weeks after operation the woman was very well and had returned to work.

Since this note was written the patient has been seen again. Several times she has had attacks of pain in the right hypochondrium, and on one occasion has had a feeling of chilliness with slight shivering—symptoms which may reasonably be attributed to a mild infection of the bile ducts. The attacks were not severe or prolonged, but they deserve mention, as other reports give conflicting accounts of the incidence and severity of this complication.

My thanks for permission to publish this case report are due to Mr. J. E. Paterson, who performed the operation, and to the late Dr. W. Martin, superintendent of Stobhill Hospital.

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Tenosynovitis in Untrained Farm-workers

The occurrence of a large number of cases of tenosynovitis crepitans among workers from this camp appears to be worth recording. Within a few months we have seen 16 such cases, 12 in men going out on farm work. As the average number of men doing such work at that time was 52 this forms a rather high proportion. The other 4 cases occurred in men doing some unaccustomed type of work in the camp. Of these 16 men 14 did office work or other non-manual labour in normal life, although no manual labour had been done by any of the men for at least 4 months. The tendons involved were the same in all cases: the extensor carpi radialis longus and the extensor digitorum communis—usually both, and in a few cases the latter only. These tendons are known to be frequently affected. Signs and symptoms were typical: swelling and tenderness along the tendon, with pain and crepitation on movement.

TREATMENT

Most of the men presented themselves at the camp hospital immediately upon the appearance of symptoms. Treatment consisted of rest, immobilization of the wrist by strapping, fomentation for two or three days, followed by radiant heat or infra-red treatment and massage with ung. iod. denigres. Under such treatment most patients improved rapidly and appeared to be completely cured within 8 to 10 days. Two cases which did not come under observation until almost 10 days after the onset took a much longer course and were not cured until 3 weeks after the beginning of treatment. In one of these cases immobilization by splinting had to be resorted to, since the patient would not obey instructions to refrain from using his hands. Two other patients, who interrupted their treatment prematurely and against advice, were forced to return by a recurrence of the symptoms, and thus the period of inactivity was considerably lengthened. In a further 2 cases some thickening of the tendon remained and is still noticeable, without, however, causing any pain or incapacity for work. Of the 12 farm-workers 11 returned to work of the same type immediately after the condition had cleared up: 10 were able to do such work without either inconvenience or recurrence of the tenosynovitis, but one had to give up on account of a relapse.

From our observation it would appear that treatment and rest should be started immediately upon the first appearance of the symptoms, thereby shortening the course and limiting the loss of working time, whereas neglect would tend to prolong the incapacity. The easy accessibility to medical aid in this camp and the necessity for reporting all ailments immediately may have made early treatment and diagnosis possible, whereas, normally, people outside might tend to disregard the first symptoms.

CAUSATIVE CONDITION

All the cases seem to have occurred after work involving repetition of stereotyped movements, and it is our impression that inexperience in such work resulted in an incorrect and uneconomic muscular effort—a fault which was rectified by continued practice. It would be interesting to know of any similar accumulation of cases of tenosynovitis now that a large part of the population has taken up unaccustomed manual labour.

It is said that a rheumatic factor may be partly responsible for tenosynovitis. We certainly have seen a proportionately large number of cases of other rheumatic manifestations, such as fibrositis, in this camp, very likely due to damp houses and damp bedding, both of which are probably unavoidable under the climatic conditions. The question of a maladjusted nutrition (lack of vitamins, "too much starch," here usually made responsible for any indisposition) can probably be disregarded,

as the farm-workers have their food on the farm and are the best-nourished section of the camp.

It seems remarkable to us that no cases of tenosynovitis have occurred among those who take part in sport, as the vast majority do, including men who for years have not played any games at all.

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Synergic Action of Intravenous Mercurials and Gum-saline in Nephrotic Nephritis

CASE HISTORY

The patient, a stonemason aged 42, was admitted to the Royal Halifax Infirmary on June 29, 1940. He had had malaria in 1917, and "winter bronchitis" for 20 years. He gave a history of 8 weeks' malaise and 6 weeks' puffiness of face and swelling of hands and legs. He complained of aching in loins, nocturnal frequency, occasional headache, anorexia, and nausea.

Examination showed pallor and wasting, with marked generalized oedema of the lower extremities, genitalia, and sacral pad; ascites with shifting dullness; and physical signs of basal congestion of both lungs. B.P. 160/100. Urine: S.G. 1028, acid; albumin++; abundant hyaline, granular, and epithelial casts; no red cells. Blood urea: 26 mg. N per 100 c.cm. Blood: R.B.C. 4,500,000, W.B.C. 8,400, Hb 75%. Faeces: fluid but non-pathological.

Treatment with the following diuretic measures was attempted without success over a period of 3 months, the average urinary output remaining about 40 oz. in 48 hours: restricted fluid intake, high protein-salt-free diet, calcium lactate, thyroid, urea, aminophyllin I.V. 10 c.cm., and 12 I.V. injections of various mercurials (1 to 2 c.cm. novurit, mersalyl, and neptal), preceded by courses of ammonium chloride. An intraperitoneal injection of 4 c.cm. of neptal on Sept. 1 was followed by an excretion of 110 oz. of urine in 48 hours. Intravenous injection of gum-saline (6% gum acacia) was then tried (Landis, 1937). A drip infusion of 1,000 c.cm. of gum-saline was given on Oct. 14 without result. Two days later a drip infusion of 1,000 c.cm. of gum-saline to which was added 3 c.cm. of neptal was given, with a resultant diuresis of 160 oz. in 48 hours. Four days later a repetition of this latter measure yielded a similar result. The patient was considered fit for discharge on Oct. 23.

Fersolate, 2 tablets thrice daily, was prescribed on admission, but was inadvertently omitted for some weeks, and a Hb value of 60% was subsequently noted.

		Urinary Output in 48 Hours
July to Sept. ..	Various diuretic methods (including 2 c.cm. I.V. neptal)	Average 40 oz.
Oct. 8 ..	Test dose 50 c.cm. I.V. 6% gum-saline	30 oz.
Oct. 14 ..	1,000 c.cm. I.V. (drip) 6% gum-saline	40 oz.
Oct. 16 ..	1,000 c.cm. 6% gum-saline + 3 c.cm. neptal I.V. (drip)	160 oz.
Oct. 20 ..	" " " "	160 oz.

COMMENT

In a case of nephrotic nephritis, neither mercurial diuretics nor gum-saline injected separately promoted diuresis, but simultaneous infusion of both substances apparently produced a striking increase in urinary output. It is suggested that the simultaneous injection of mercurials with serum, plasma, or whole-blood transfusions might improve the otherwise poor results recorded in these cases by Brown, Gray, and Mollison (1942), using serum transfusions alone. From their findings these authors suggest that tissue fluid is drawn into the circulation during transfusion. It is possible that the simultaneous presence of mercurials in the blood might act effectively on the withdrawn tissue fluid in cases of nephrotic oedema. The frequent association of low haemoglobin values in these cases further suggests that whole blood might in certain cases yield better clinical results than normal serum or plasma, provided the addition of mercurials does not adversely affect the course of whole-blood transfusions.

I wish to thank Dr. L. Glick, assistant honorary physician to the Royal Halifax Infirmary, for permission to publish this case.

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