case of venereal syphilis, for various countries in Europe and for the white population in America. So far is this from being the case that even in Europe there is a considerable area in which tabes and paresis are conspicuous by their very rarity in syphilitics. In the region of Bosnia and Herzegovina there is recorded an endemic form of syphilis; young children are infected with extragenital primary sore, but tabes and paresis are rarely observed. In America observers find that negroes living under comparatively civilized conditions are much less affected by tabes and paresis than the white population. It does not concern us here whether this difference in incidence is due to race or occupation or the florid nature of the secondary eruption or any combination of these or other factors; what is important to note is the fact that the incidence in negroes is less than in whites. When we turn to the natives of subtropical and tropical climates living at home in their own lands we find a remarkable state of affairs. The evidence from innumerable regions and observers shows that tabes and paresis, as the results of syphilis, are excessively rare among these populations. The rarity of tabes and paresis, in spite of great prevalence of syphilis, in Malaya, India, British Guiana, the Panama zone, and the east and west French colonial territories is the subject of continual comment. The records of these areas approximate closely, though they do not quite equal, that of Cook in Uganda, who, in 100,000 syphilitics, never once found a case of tabes or paresis.

Thus all the evidence goes to show that there are vast areas in the Tropics and subtropics, with very large populations affected with syphilis, where the dictum that syphilis produces tabes and G.P.I. cannot be used in the sense implied. Indeed, the absence of these two sequelae of syphilis focuses the attention of all observers. Here again it appears to me that the constructors of the tables of differences between yaws and syphilis introduce a fallacy by comparing things which are by no means strictly comparable. Yaws, peculiarly a disease of children and one acquired non-venereally and in the Tropics, should not be compared with syphilis in general; it ought to be compared with the syphilis of native children acquired non-venereally in tropical regions. In the absence of figures for such infections we should at least compare it with syphilis as it occurs in the Tropics. Even on this somewhat unsatisfactory basis the result is highly suggestive, and if recorded in the usual form is: in yaws of tropical countries, tabes and paresis very rarely recorded; in syphilis in tropical countries, tabes and paresis very rarely recorded. When put on even an approximately comparative basis, therefore, the incidence of tabes and paresis does not assist us in distinguishing yaws from syphilis.

Primary Lesions.—Another argument frequently used is that in yaws the sore is extragenital, whereas in syphilis it is usually genital. I should like to suggest that this point, although much emphasized by all writers, has no standing whatever as a differential criterion. It is simply the statement of an epidemiological fact. By the adoption of this identical formula a person can prove to his own satisfaction, if he desires to do so, that infantile acquired syphilis in England is quite a separate disease from venereal syphilis here, because the former has an extragenital primary lesion while in the latter the primary lesion is usually genital.

Itching.—The next point stressed by some authors is that in yaws itching is common whereas in syphilis it is rare. The evidence, however, whether in descriptions of yaws or syphilis, is very inconclusive, as regards both the primary lesion and the secondaries. The qualifications as to the degree and kind of itching in various conflicting statements make it obvious that there is little agreement.

One important fact—namely, that the lesions in yaws itch more than the corresponding lesions in syphilis—appears to be overlooked. The skin of a naked native child in the tropical rural areas is constantly exposed to a whole series of agencies, such as biting insects, skin-penetrating larvae, and abrading and injurious objects, any or all of which are apt to initiate pruritus. From my observations of groups of children in tropical villages I formed the opinion that itching is almost a property of the skin of the native child, and that degrees of it are not likely to help us in differentiating yaws from syphilis.

Occurrence of Alopecia.—It has been stated that alopecia never occurs in yaws but may occur in syphilis. So far as I have been able to observe, the occurrence of alopecia among the negroes in their own countries is extraordinarily rare; in this there is a contrast with the white people of Europe and America. In so far as alopecia attributable to syphilis is concerned the evidence from the latter countries is very conflicting. It is unfair to contrast yaws alopecia with any other than alopecia resulting from child syphilis in the natives of the Tropics; it does not appear from the literature which I have been able to consult that figures exist on this aspect of the problem. It would be of great interest to ascertain whether alopecia exists in, and constitutes a character of, even venereal syphilis in the Tropics.

MUMPS AND APPENDICITIS

BY

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AND

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In the *Epitome* published with the *British Medical Journal* of July 2nd an abstract was given of an article by Sandler and Finne (*Archives of Pediatrics*, March, 1932) entitled, "An unusual case of epidemic mumps complicated by gangrenous appendicitis." These authors state that only five examples of this combination of diseases have been described in the literature, and we are therefore encouraged to report the following case:

HISTORY OF CASE

On May 25th, 1932, a boy, aged 7 years, was seen by one of us (J. D.). He had been "off colour" for some days; on the 23rd he had complained of pain on swallowing, and his parents had noticed that his face was swollen. A week previously a school friend had developed mumps. On examination both parotid and submaxillary glands were found to be swollen and tender. The temperature was 100° and the pulse rate 100. The appetite was lost. A diagnosis of mumps was made and the appropriate treatment instituted. On May 26th the symptoms had increased a little, but two days later the pain and swelling were diminishing and the appetite had returned. On the morning of the 29th the boy seemed to be convalescing well, the bowels had opened, the temperature was 98.8° and the pulse rate 90. That evening he complained of pain in the epigastrium, vomited, and became restless. On examination some muscular resistance was noted on palpating the upper abdomen. The temperature had risen to 100°, the pulse rate remained at 90. There was a slight glycosuria. A tentative diagnosis of pancreatitis was made.

On the next day (May 30th) the temperature was still 100°, but the pulse rate had risen to 98. Vomiting had stopped, but there was anorexia. The pain was still in the epigastric region, but was apparently increased, as was the muscular resistance. There was some tenderness on palpation of the umbilical region. The bowels had not moved since the previous morning. On May 31st the temperature was 100° and the pulse rate 100. The pain, which was still epigastric, had diminished, but the tenderness and rigidity had increased. The bowels were opened. On the morning of June 1st there

was very little pain, but there was marked tenderness and rigidity, more especially in the region of the right iliac fossa. There was some frequency and pain on micturition. A diagnosis of acute appendicitis was made. At three o'clock on the same day the boy was seen in consultation by both of us. The temperature was 100.4° , the pulse rate 136, and the respiratory rate 28. The boy denied that he had any pain. The abdomen did not move on respiration, and was slightly distended. There was marked tenderness and rigidity over the whole of the lower abdomen, but more especially over McBurney's point. There was no cutaneous hyperaesthesia. On rectal examination there was extreme tenderness in the recto-vesical region. The swelling of the salivary glands had diminished greatly, especially on the right side. A diagnosis of acute appendicitis with perforation and peritonitis was made.

THE OPERATION

The boy was immediately transferred to the General Hospital, Birkenhead. At 4.30 p.m. the abdomen was opened (J. B. O.) under gas-and-oxygen anaesthesia through a split muscle incision. A large quantity of thin, purulent, slightly offensive fluid gushed out of the incision, and it was found that the whole lower abdomen and pelvis was involved in the peritonitis. The appendix, which was gangrenous and perforated, was removed. A split rubber drain was led down into the pelvis through a suprapubic stab incision. The appendix incision was closed with a small piece of rubber glove inserted down to the muscle layer.

Convalescence was uneventful. The pulse rate and temperature quickly returned to normal, the bowels were opened on the third day and continued to act daily until the boy left hospital on June 13th. He is now in perfect health.

COMMENTARY

The details of this case correspond very closely with the history of the cases reported by Simonin (1903), Jalaguier (1909), Rosenow and Dunlap (1916), Benassi (1925), and Sandler and Finne (1932). The case reported by Gaudier and Swynghedauw (1925), and mentioned by Sandler and Finne, should not be included, as the parotitis appears to have been a suppurative condition secondary to acute appendicitis and arising after operation.

The aetiology of mumps is still a mystery, and the virus remains unknown. From the frequent occurrence of orchitis, pancreatitis, etc., it appears to attack certain glands, with a special predilection for the parotids. Opportunities to determine the morbid condition have been few, but Virchow described the condition of the gland as one of inflammatory serous and cellular infiltration of the interacinous and periacinuous connective tissue, the parenchyma being but slightly involved. While the parotid glands are especially affected the submaxillary salivary glands are usually involved, the sublingual glands less often. The lymph glands at the angle of the jaw and the parotid lymph gland are enlarged. Koplik states that in every case he observed there was distinct angina and swelling of the tonsils. Enlargement of the lachrymal glands has been noted in many cases. Orchitis is a very common complication, and usually occurs about the eighth day. Less commonly ovaritis, mastitis, pancreatitis, and enlargement of Bartholin's glands are noted. It is generally admitted that these complications are metastatic infections arising from the primary foci in the salivary glands. Is appendicitis another possible metastatic complication of mumps or is their association simply a coincidence? It is interesting to note that in the case recorded above, and in all the cases previously reported, the onset of the acute appendicitis has occurred a week or thereabouts after the parotitis started. In the words of Benassi: "In these cases there is no question that the appendicitis developed at the height of the parotitis, and with some doubt and reserve there is enough evidence to support the following conclusion: that the virus or organism which lodges in Stenson's duct travels to the appendiceal region by way of the digestive tract or by way of the haematogenous or lymphatic systems."

Memoranda

MEDICAL, SURGICAL, OBSTETRICAL

BILATERAL SUPERIOR THORACIC GANGLION NEURECTOMY IN PARKINSONISM

The results obtained in the case reported below are thought to be of sufficient interest to justify publication.

CASE RECORD

The patient, a woman aged 34, had "flu" in 1924, and was admitted some time later with post-encephalitic Parkinsonism to the Maudsley Hospital, where she was treated for ten weeks. For the last seven years she has been treated at home with injections of hyoscine (grain 1/75 twice daily). For the two months previous to admission she was unable to feed herself or to walk.

On July 7th, 1932, she was admitted to the Archway Hospital, Highgate. She had marked tremor and rigidity, a mask-like expression, slow cerebration, excessive salivation, a greasy skin, and an advanced degree of talipes equino-varus in the left foot. An attempt was made to substitute tincture of stramonium for the hyoscine, but this was strongly resented by the patient, who became very depressed and unable to sleep.

Treatment

The operation described by N. D. Royle in the *Journal* of June 11th, 1932, is stated by him to decrease the tremor of the homolateral hand, and, by increasing the cerebral circulation, to decrease the spasm of the contralateral leg and to improve the mentality of the patient.

On July 18th the right superior thoracic ganglion was removed after a deep dissection in the root of the neck, according to Royle's description. There was no difficulty in finding the ganglion, which was removed and sent for section. On August 30th, at the request of the patient and her mother, a similar operation was performed on the left side. A previous subcutaneous tenotomy had been performed on August 18th to correct the deformity of the left foot.

Results

Immediate.—This was the same after each operation. While the patient was still under the anaesthetic the pupil became contracted and the sweating of the face ceased on the homolateral side. After recovery from anaesthesia the patient stated that she felt much more alive, and smiled when spoken to. On the homolateral side the tremor had disappeared at rest, and was markedly diminished on performing voluntary movements; the sweating of the face had ceased, and the salivation was lessened. Ptosis of the eyelid was present, and a decrease of the labio-nasal fold was noticed. The homolateral arm had a well-marked vaso-dilatation, with a rise of temperature. No difference was noticed in the rigidity of the legs.

One Week Later.—The ptosis of the eyelid and the vaso-dilatation of the arm had disappeared. The patient was able to drink from a glass of water held in either hand, and her cerebration was much quicker. There was no tremor at rest; she could read a book for longer periods, and she smiled when spoken to.

Six Weeks Later.—There was no tremor at rest. The patient could feed herself, and stated that she felt brighter than before the operation. She now has no injections of hyoscine, and is taking extract of stramonium. She eats and sleeps well, and her attacks of depression are much less frequent. The wounds in the neck show only as a faint scar. No change can be noticed in the rigidity of the legs. The patient is being fitted with surgical boots, but at present walking is not good, due partly to deformity and rigidity, and partly to wasting of the limbs from disuse.

COMMENT

The case was an advanced one of eight years' standing, and as a result of the operation there is a greater improvement in the mentality of the patient than could have been obtained by medical treatment alone. The