GUMMA OF THE LARYNX NECESSITATING TRACHEOTOMY

(NEGATIVE WASSERMANN REACTION).

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THE following case of gumma of the larynx presents several interesting points, and so seems worthy of being recorded.

In the first place, although there was no doubt that the case was one of syphilis, yet the Wassermann reaction was negative. The serum from this case was used in one or two subsequent examinations, and so had any error occurred in the first examination, one would have expected it to show itself subsequently. Instead, it always behaved as a normal serum.

A second point of interest is that a gumma of the larynx is rarely seen, is generally of much smaller size, and in consequence the symptoms in these cases do not become urgent.

A third point is the rapid increase in size in the short space of twelve hours. In the morning the patient was examined in the sitting position, whilst at night she was in a semi-recumbent position, and the dyspnoea was more urgent. Still the examination was carried out as carefully as possible, a clear view of the larynx was obtained, and every endeavour was made to see the left cord. At the time it was feared that the increased size might indicate that breaking down processes had commenced, although against this was the fact that little or no congestion of the mucous membrane was present.

The very large doses of iodide which the patient took without the slightest inconvenience is a further point of interest. Had tracheotomy not been done one would have hesitated about pushing the drug so vigorously, lest oedema of the already irritated larynx should occur and render an operation unavoidable. Large doses of iodine are, as a rule, very much better tolerated than is generally supposed, provided that they are not used for too long a period. In the present case the large doses were given in order to get the patient rapidly under the influence of the drug, as had so large a gumma broken down convalescence would have been much prolonged, and marked deformity and impairment of function of the larynx would have resulted even had the cartilage escaped. The patient was constantly watched for any signs of iodism, but none appeared.

Mrs. X., aged 40, was sent to me on the morning of August 28th, 1913, on account of some difficulty of breathing and intermittent attacks of dyspnoea, which had first appeared a month before and had been getting more frequent and more severe. She had been very nervous for some years, and for the past six weeks had been undergoing a modified rest cure at home. On the night of August 27th she had a severe attack of dyspnoea, which had not passed off when she came to me.

Condition when First Seen.

The breathing was rapid, the face pale, the eyes widely open with an anxious expression, and the alae nasi were dilated. Expiration was quiet, but inspiration was difficult and accompanied by a loud crowing sound. The voice was reduced to a whisper.

On the right side the arytenoid cartilage was displaced backwards by a large smooth swelling, which completely hid the vocal cord and protruded beyond the middle line. The tumour appeared to obliterate the ventricle completely, and distended the ventricular band. The mucous membrane was normal in colour or only very slightly reddened. The left cord could be partially seen throughout its entire length, and by manipulating the mirror so that a better view could be obtained it was seen to be slightly congested. A very narrow chink between it and the swelling represented the breathing space, except for the opening at the posterior end caused by the displacement of the right arytenoid. On gently touching the swelling with a probe it felt fairly firm.

On the front of the right tibia was a small node somewhat tender to pressure, and which, she said, was sometimes painful,

especially when lying in bed. Over each ligamentum patellae was a small punched-out sore, surrounded by a dusky area. On the right thigh was a sore about the size of a shilling, which communicated with a smaller one, a small bridge of skin being left between the two, and both were covered by a hard, thick crust. There was a definite history of rash, sore throat, and falling out of hair some four years previously. All the children (seven) were said to be healthy, and only one miscarriage had occurred seven years previously.

Blood was taken for the Wassermann test, and potassium iodide and mercury perchloride prescribed. Arrangements were made for her reception into a nursing home, to which, however, she did not go till 4 o'clock.

Tracheotomy.

As she had not been out of doors for several weeks and was brought to me in an open motor car, it was thought that possibly some of the dyspnoea might be due to this and to her excitable state, so she was put to bed and kept as quiet as possible for a few hours. At first the breathing became slightly easier, but later, in spite of a dose of potassium bromide, the respirations became rapid (36) and pulse 120, and the inspiratory crowing very noisy; there was marked retraction of the lower intercostal spaces, dilatation of the alae nasi, and some cyanosis, so that tracheotomy, for which preparation had been made, had become imperative. On examining the larynx before operation only the posterior third of the left cord could be seen clearly, and only occasionally could a glimpse of a portion of the rest of the cord be caught. The accompanying sketches give some idea of the appearance of the parts.

After-History.

Immediately after operation the respirations dropped to 25 and the pulse to 96. On the third day the swelling was still large,

but from then onwards it rapidly diminished, and on the sixteenth day the tube was removed. This might have been done sooner, but at the time it was thought safer to keep a small tube in for a few days. The patient was of a talkative disposition and difficult to control in this respect, and it was feared that the gumma might again increase in size if she began to use her larynx too soon.

Owing to circumstances in the laboratory the Wassermann test could not be carried out for several days, and the iodide was pushed till by the fourth day the patient was taking 100 grains a day in 25-grain doses. The Wassermann reaction was negative, and although the case was clinically undoubtedly syphilis, for various reasons it was decided not to use salvarsan, and this could be more safely omitted as she was reacting so well to potassium iodide. The periosteal node was getting smaller, the sores were healing well, and in every way the patient was improving.

On the twentieth day she went home with the larynx almost normal in appearance and the voice weak but clear. Six weeks later the voice was still somewhat weak but the larynx was normal in every respect.

Fig. 1.—11 a.m.

Fig. 2.—11 p.m.

A RARE FORM OF LICHEN RUBER PLANUS.

BY

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THE cases of skin disease described in the *Epitome of the JOURNAL* of May 9th (No. 266) so closely resemble a case lately under my care that I think the following notes worth reporting:

The patient was a married woman, aged 32, and healthy except for the skin affection. There was nothing important in the previous history except the tendency of the rash to relapse. At one time the mouth was so badly affected with the "silver grey patches" described by Malcolm Morris¹ that an opinion was expressed that the disease was syphilitic. A careful consideration of all the facts convinced me it was not syphilis. The one thing that made me doubt my diagnosis of lichen planus was the same author's statement:² "In the adult there are never any vesicles or pustules mingled with the papules." Having now seen the report of Pollard's cases in the *Epitome*, I no longer doubt the correctness of the original diagnosis. Brooke and MacLeod state, "A bullous eruption has appeared in a few cases."³

When first seen by me, on August 9th, 1913, the condition of the skin closely corresponded with Malcolm Morris's description. All four limbs were thickly covered with intensely irritable, hard, dusky red papules. There was free desquamation. On the abdomen and back there were also groups of papules, the skin being thickened, and discoloured with deep sepia-brown pigmentation. In places the pigment had been absorbed, leaving white atrophic-looking areas with abrupt margin. The mouth was still affected with small aphthous spots.

She was admitted to hospital on August 13th, and kept entirely in bed. Liq. arsenicalis mvi was given thrice a day, but no improvement followed, perhaps because the arsenic was not sufficiently pushed. The temperature at first was 99.2°, and gradually increased to 101° on August 28th. On September 16th it became normal, but rose again after this. On August 31st she was given 5jss doses of liq. hydrarg. perchlor. with potassium iodide gr. v. The limbs of one side were wrapped in an ointment of zinc, mercuric nitrate, and coal tar, and those of the other in an ointment of mercury perchloride, carbolic acid, and zinc.

On September 25th the patient complained of increased irritability of the feet, and on their dorsal surfaces a few discrete and scattered bullae, the size of a haricot bean, were noticed. She thought they were caused by rubbing the feet one on the other. The bullae rapidly covered the whole surface of both feet, reaching a little way above the ankle, and became confluent, so that the whole epidermis of both feet appeared undermined with fluid. The dose of iodide was small, but it was omitted on account of the occasional occurrence of vesicular eruptions under its use. The liq. hydrarg. was increased to 3ij doses. While the feet were at their worst the rash on the rest of the body gradually disappeared, and along with it the itching, leaving the skin smooth but discoloured (brownish-red).

The feet remained sore and painful some weeks. They became covered with thick crusts, from under which turbid serum exuded. They were treated with the first of the above-mentioned ointments and zinc-boric dusting-powder. During this phase of the illness the temperature rose again to 100°, and on October 11th and 15th there were sharp, sudden rises to 103.6° and 103° respectively, indicating absorption from the raw surfaces. There was no ulceration of the dermis. On October 12th quinine was given in place of the mercury.

The crusts on the feet gradually dried and separated, leaving a smooth reddish surface of new epidermis. The patient was allowed to get up on November 9th, on account of her urgent wish to go home, although the feet were not considered soundly healed. She left hospital on November 15th with the result "cured" on her bed-paper. Unfortunately, I heard from her doctor in the country a few months later that the rash had reappeared, an occurrence quite in harmony with the known tendency of the disease to relapse.

It might be argued that in this case the disease was syphilitic because improvement occurred under the use of mercury, but this treatment has also been used successfully for lichen planus by recognized authorities on that disease—for example, Unna, quoted by Morris. The rash in this case was so persistent that we discussed the advisability of injecting salvarsan as a more efficient method of giving arsenic. This treatment is also suggested by Polland,⁴ but his cases responded fairly well to arsenic internally. My case resembles Polland's in the fact that the bullous lesions mainly occurred on the lower part of the legs.

REFERENCES.

¹ *Diseases of the Skin*, 1899 edition, p. 170. ² *Ibid.* ³ Allbutt's *System*, vol. ix, p. 416. ⁴ *BRITISH MEDICAL JOURNAL*, Epitome, May 9th, 1914.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

THE TRANSFER OF THE INTRACELLULAR PARASITES OF RABBIT SYPHILIS TO MONKEYS.

In a letter published in the *BRITISH MEDICAL JOURNAL* of February 7th last, p. 341, a natural disease called "rabbit syphilis" was described with the finding of a spirochaete in the lesions which resembles *Spirochaeta pallida*; and intracellular parasites were also described in this rabbit syphilis resembling those found in human syphilis.

The transfer of the rabbit intracellular parasites to monkeys has now been accomplished. In January last Dr. Penfold, of the Lister Institute, inoculated two Rhesus monkeys with an extract of the spleen of a naturally infected syphilitic rabbit. At first penile vaccination was performed, but this failed to infect. Then inoculation into the testicle was tried. No visible local lesions occurred, but in April both monkeys began to lose their

hair. On May 18th one monkey sickened as of a septicaemia, and died. *Post mortem*, no local lesions could be discovered, but the heart's blood was found to be teeming with intracellular parasites, some showing the developmental spirochaete forms as well as the free amoeboid bodies similar to those already pictured in the *BRITISH MEDICAL JOURNAL* of December 14th, 1912, as occurring in human syphilis.

No free spirochaetes were seen in the blood, but the intracellular and extracellular developmental forms were very numerous; and their cycle of development appeared to be the same as that first found in *Lymphocytozoon cobayae*, the similar intracellular parasite of guinea-pigs which develops into spirochaetes.¹

The transfer of these parasites to monkeys would appear to fill the last gap in the train of evidence in favour of their being the causative agent of rabbit syphilis, and seems to show conclusively that these intracellular parasites are developmental forms of the spirochaetes; for by it Koch's postulates are fulfilled, and proof is thus gained that intracellular parasites which develop into spirochaetes are the cause of this disease, which resembles both clinically and pathologically human syphilis.

E. HALFORD ROSS.

The John Howard McFadden Researches.

Lister Institute, Chelsea, June 5th.

HYDATID DISEASE OF THE LUNG
SPONTANEOUSLY CURED.

Cases of spontaneous cure of hydatid disease of the lung are sufficiently rare to merit record. The following case first came under my observation in June, 1913. The patient was a married woman aged 26. She had never lived abroad, and until the onset of her illness had enjoyed good health. Her first symptom was a sudden attack of haemoptysis which was not profuse. Cough and some pain in the chest persisted for a week, and then passed off. She had no further symptoms for a month, when she again coughed up blood and with it a quantity of membrane. When examined a few hours afterwards she looked somewhat anaemic but otherwise normal; there was slight dyspnoea, but no fever. Examination of the chest revealed a small area of dullness in the first left intercostal space close to the sternum; it extended to the left for 2 in. There was a dilated vein running up to this region from the left breast. There were no râles, but the breath sounds over the dull area were high pitched and bronchial in character, and pectoriloquy was well marked.

The expectoration contained no tubercle bacilli, but the membrane showed a characteristic laminated structure, and there were numerous hooklets. A differential count of the leucocytes showed 5 per cent. of eosinophiles.

After bringing up the membrane all symptoms rapidly subsided, and in a few days she was apparently well.

I saw her again nearly a year after the first onset of symptoms, and she was perfectly well; the dullness and bronchial breath sounds were no longer present, and there were no abnormal signs in any part of the chest. A skiagram of the whole chest showed nothing abnormal. Examination of the liver and other organs revealed nothing.

It is clear that the condition was a small cyst which ruptured into the left bronchus and was expelled. The symptoms at the time of rupture were extremely mild, there was no suppuration, and down to the present time there has been no evidence of recurrence.

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A CASE OF CONSERVATIVE OPERATION FOR
CEREBRAL ABSCESS OF OTITIC ORIGIN.

A CHILD, aged 6, was admitted to hospital with a history of otorrhoea of indefinite duration. The mastoid region bulged; temperature and pulse were subnormal; the rectus externus oculi was paralysed on the affected side, and, on lumbar puncture, the cerebro-spinal fluid, although quite clear, came out under considerable pressure.

Destruction of the contents of the middle ear was found to be much less advanced than was to be expected from the history. The perforation was limited to the postero-

¹ *Proc. Roy. Soc., B*, vol. lxxxv, p. 67.