inflammations. He therefore classifies syphilitic lesions into the following: (1) Papular inflammations, being equivalent to secondary syphilitic lesions and affecting the skin chiefly; (2) gummatous inflammations, being equivalent to tertiary manifestations, and may affect any part of the body; and (3) interstitial inflammations, which he calls quartary manifestations, and which only affect the internal organs. The first class reacts to mercury, the second to iodide of potassium, and the third is refractory towards both. As examples of interstitial changes, he quotes fibrous orchitis and syphilitic fibrosis of the liver. While the secondary changes end in absorption, the quartary changes are irreparable. After discussing the histological changes in these manifestations, he passes on to consider the changes found in tabes, and divides these into, first, parenchymatous degeneration of the nervous elements of the posterior columns of the spinal cords; and secondly, overgrowth of the interstitial tissue of the cord, the so-called neuroglia. The rest of the histological changes are not constant, and are, therefore, of minor importance. In deciding which of the two are primary, he argues by analogy that the interstitial changes are primary. He points out that in cirrhosis of the liver the cell degeneration is always regarded as secondary; so in chronic interstitial nephritis and in atrophía lœvis of the tongue. He therefore argues that tabes is a quartary manifestation of syphilis. He next meets each of the arguments raised against the suggestion that tabes is a syphilitic affection. That it does not react to mercury or iodide of potassium is explained, since none of the quartary manifestations do. The second objection is that in the majority of tabes cases there are no traces of other co-existing syphilitic lesions of the skin or internal organs, and conversely, in the severer cases of syphilis tabes dorsalis very rarely is found. In reply to this, he regards the manifestations of syphilis as being due to a micro-organism, the virulence of which appears to diminish in the course of time. While the virulence is great, the lesions caused are of the nature of secondary manifestations, and only when this has become much attenuated are quartary changes produced. Thus it is not likely when interstitial changes are found that gummatous or simple inflammatory changes will also be present. The third objection is that the extraordinary frequency of syphilis, when compared with the rarity of tabes speaks against a connection between the two diseases. He points out that all the late manifestations of syphilis are rare, and if one compares the number of syphilitics who suffer from a gummatous affection of the elbow-joint one will find that the percentage is still less than in the case of tabes. The fourth objection is that sufferers from tabes can infect themselves with syphilis. That a want of immunity cannot be taken as proof against the previous existence of syphilis is shown by the fact that syphilitics with tertiary manifestations at times have acquired fresh syphilis. The last objection is that tabes is a system disease, and that these diseases cannot be syphilitic. According to Lesser, the characteristic of interstitial syphilitic changes is that they have a predilection for certain localizations, and that nowhere is this more clearly shown than in syphilitic fibrosis of the liver. In conclusion, he remarks on the coincidence of tabes and aneurysm. He finds that every fifth patient suffering from tabes dorsalis shows signs of aneurysm. From its histological characters, it appears that the majority of aneurysms are interstitial syphilitic manifestations, and this he considers is evidence in favor of his views.

JELLIFFE.

EXOPHTHALMIC GOITER SUCCESSFULLY TREATED WITH ANTITHYROIDIN.

Möebius's favorable results from the employment of antithyroid serum in exophthalmic goiter induced Dr. Josionek, of Mildenau-Wiesenbad, to try the serum in two typical cases of the disease. Both patients showed the characteristic symptomatic trinity: exophthalmos, tachycardia, and

increase in the size of the thyroid; there was also a distinct tremor, general restlessness, and insomnia. One patient, a man of fifty-four years, had noticed the first symptoms two months prior to treatment. For the first week the patient was treated hydrotherapeutically—cold tubing over neck and heart and compresses around the body. This treatment improved the insomnia, the pulse was reduced from 112 to 93, but the size of the neck, which measured 43 centimeters, remained uninfluenced. Then antithyroidin-Möbius, 1 gm. (15 grn.) twice a day, later on 2 gm. (30 grn.) twice a day, in a little milk, was given to the patient. From April 25 to May 8 patient took in all 30 gm. (1 oz.) of the antithyroidin. The thyroid became distinctly softer, the size of the neck diminished by 6 centimeters (2½ inches), the tremor had almost disappeared, there was hardly anything abnormal in the position of the eyeballs, the pulse rate was reduced to 78 per minute, sleep was good, and the general condition and spirits of patient were excellent.

The second patient, a slender woman of fifty-one, had noticed a swelling in her neck towards the end of her school years. As a result of severe excitement on account of financial loss in 1903, the swelling increased; at the same time the eyeballs began to protrude and heart trouble set in. The patient used various remedies under medical advice, and among other forms of treatment she drank milk from thyroidectomized goats for ten weeks, but her condition remained uninfluenced. When she came under the author's treatment on June 5 she presented the following symptoms: Pronounced exophthalmos, restlessness, pressure in the head, tremor; circumference of neck, 35 centimeters; pulse, 96 per minute. The patient took 2 gm. (30 min.) of antithyroidin a day for ten days, with no notable improvement; after an interval of about eight days the serum was again given to her in double the dose, namely, 2 gm. (30 min.) twice a day (1 dram daily). As a taste corrigent she used strawberry lemonade. In the course of six days there was a distinct improvement in the general condition, as also in the special symptoms of the disease. After the use of another 30 gm.—50 gm. in all—the very hard thyroid became quite soft, the circumference of the neck diminished 2 centimeters (4-5 inch), and the pulse-rate was reduced to 82 per minute. There was only a slight change in the position of the eyeballs. The patient was satisfied with the result, having improved bodily and mentally to such a degree that she was enabled to undertake a voyage.

These two cases prove the favorable influence of antithyroidin-Möbius on Basedow's disease, and they also show that recent cases are more readily influenced than old ones. The antithyroidin contains one-half of 1 per cent. of phenol, for the purpose of preservation, but the author has not noticed any injurious effect from this addition, thus corroborating Möbius's statements in this respect. The antithyroidin is prepared by E. Merck, of Darmstadt, from thyroidectomized sheep, and is obtainable in glass containers, 10 gm. (2½ drams) each.—*Med. Woche*, 1904, No. 37.

JELLIFFE