four glasses of port wine to-day, but is none the better for it. Takes very little tea, but a good deal of snuff. Ordered reduced iron, a grain and a half, in pill, three times a day; and one twenty-fourth of a grain of strychnine, two minims of muriatic acid, ten minims of spirit of chloroform, in one ounce of water, three times a day; and to leave off snuff. I saw him again three years later. He was looking very well, could walk eight miles or more, had fainting feelings at times, and some cardiac uneasiness; pulse so weak that no tracing could be got, even with the lowest pressure; he smokes, but has left off snuff.

There is a greater probability in this instance than in the preceding that the symptoms were dependent on fatty degeneration of the heart. The advanced age of the patient, and his having got stout after having been of spare make, point decidedly in this direction. The free use of snuff may certainly have caused some tobacco-intoxication, but much less probably than smoking. That so much exertion was possible with so defective a heart is very noteworthy.

(To be concluded.)

STRUCTURAL CHANGES OF THE SYMPATHETIC NERVE IN DIABETES.

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[We have been favoured by the author with the following abstract of his paper on the Anatomical Changes in the Sympathetic Nerve in Diabetes, read before the Cracow Medical Association on Nov. 7th, 1877. It will be read with interest in connexion with the subject of the relation between lesions of the nervous system and saccharine diabetes.]

DURING the past year I have had the opportunity of making post-mortem examinations in five patients dying of diabetes in the Cracow Medical Clinique. Encouraged by the fact that, in spite of some hints given by various pathologists, as Duncan,¹ Percy,² Lubimoff,³ and De Giovanni,⁴ the subject had not been very minutely investigated, I endeavoured to ascertain whether any changes of the ganglia of the sympathetic nerve were to be found in diabetes mellitus. With this object I excised the whole tract of the sympathetic nerve in each case, and after previously hardening it in Müller's fluid, submitted it to a careful microscopical examination.

The following are the results obtained by my investigations:—

1. In all the cases I found an increased amount of connective tissue in the ganglia, especially in the upper and lower cervical ganglia. This change consisted partly in an hypertrophy of the connective stroma normally occurring in the sympathetic ganglia, and partly in the accumulation of newly-formed connective tissue between the nervous elements, a change that was beautifully seen in transverse sections of the ganglia. In some sections the amount of connective tissue was so great it was only with considerable difficulty that rudiments of nervous tissue could be detected. The capsules of the nerve-cells appeared to be thickened, having numerous granules adhering to them. In some parts numerous cells, partly round, partly fusiform or elongated, were deposited between the fibres of connective tissue, this cellular infiltration being most marked around the blood-vessels.

2. In one case I found abnormal dilatation of bloodvessels in the solar ganglion, the vessels being tortuous and distended with corpuscles. In some of the microscopical preparations the dilated vessels covered nearly one-half the field. There were also irregular accumulations of red corpuscles in the outer spaces between the nervous elements, the result of small hæmorrhages.

3. The most interesting change was that presented by the nervous elements themselves. The nerve-cells, the capsules of which were thickened as above described, appeared to be of smaller size than normal; their protoplasm was more

homogeneous, especially in those parts of the ganglia where the cellular infiltration predominated. In one case, that of a young subject, there was an increased amount of dark-yellow or brown granular pigment in the nerve-cells. Turning now to the nerve-fibres, it may be mentioned that in the normal ganglia of the sympathetic, in addition to bundles of grey non-medullated fibres, there occur a fairly large number of *white medullated* fibres, arranged partly in separate bundles enclosed within a distinct sheath of areolar tissue, and partly intermixed in the bundles of the non-medullated fibres. I did not find any bundles of medullated fibres in the sections of ganglia from these cases of diabetes; but here and there isolated and extremely atrophied white fibres could be distinguished in the midst of the grey, which were well preserved in the preparations. These last-named fasciculi were even much atrophied, the bundles being small, and the individual fibres wasted, and in parts almost concealed by cellular infiltration. The changes in the connective stroma of the ganglia above described sufficiently account for the atrophy of the nerve-fibres and cells; an effect very frequently observed in other parts of the nervous system—e. g., the brain and spinal cord—where there is hypertrophy of the connective tissue. It must, however, be reserved for future investigation to ascertain whether this atrophy of the nerve-fibres does not extend higher up in a centripetal direction.

The above-mentioned changes were met with, to a more or less extent, in each of the five cases examined, and they presented an excellent illustration of extremely advanced degeneration of the cervical sympathetic ganglia. The results of this examination of the sympathetic nerve in diabetes, although based on a small number of cases, are in perfect accordance with physiological experimentation, for Cyon and Aladoff⁵ have shown that excision of the cervical ganglia is immediately followed by diabetes. So extensive a degeneration of the ganglia as that above described may be considered as equivalent to their excision.

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THE VOMITING OF PREGNANCY AND ITS TREATMENT.

By M. O. JONES, M.D., OF CHICAGO.

WITH NOTES OF A CASE.

By J. MARION SIMS, M.D.

ALTHOUGH a secondary or reflex manifestation, the vomiting of pregnancy is of such frequent occurrence, and often obstinate persistence, as to have acquired a name and place in medical literature.

We know that pregnancy, in perhaps a large majority of cases, if, indeed, there is an exception, gives rise to morbid conditions of some organ or organs, continuing during a part, and sometimes the whole term, of gestation. There is a susceptibility of the system to excitement during pregnancy that does not exist at other periods, owing, no doubt, to the intimate connexion of the organs of generation with the cerebro-spinal and the ganglionic systems of nerves. The functions of the brain, those of respiration, circulation, secretion, digestion, and nutrition, may one or all be disturbed by conception and the development of a new life within the old.

The stomach is usually the first organ to sympathise, and it is generally independent of any noticeable change of temperature or disturbance of circulation. This sympathy of the stomach is of various degrees of intensity, from a fastidious taste and appetite to nausea and vomiting. The period after conception at which this disturbance commences, and the length of time it continues, vary in different individuals as well as in the same subject in succeeding pregnancies. While in some persons the nausea, or morning sickness, as it is sometimes called, commences almost immediately after conception, with the majority it does not begin until from the third to the fourth or sixth

¹ Ziemssen's Handbuch, Bd. 12.

² Lib. cit., Bd. 13.

³ Virchow's Archiv, 61, p. 145.

⁴ Virchow and Hirsch: Jahresbericht (1876), ii., 269.

⁵ E. Cyon and Aladoff, Bulletin de l'Académie Imp. Roy. des Sciences de St. Petersburg (1871), t. xvi., No. 4, p. 308.