About a year after the commencement, abundant lymphocytosis was found. At this time, he was unable to walk, being very spasmodic and feeble, with exaggeration of the reflex of Babinski on both sides. The upper extremities presented intentional tremor; there was incontinence of urine. There was nystagmus and diminished visual acuity. The speech was merely slow, and there was no vertigo. Some months later began an edema localized to the legs; it was hard, smooth, painless, the skin being reddened and showing desquamative pityriasis. The muscles became more atrophied, bulbar symptoms appeared, while nystagmus disappeared, patient became edematous, cachectic and died of bronchopneumonia. At the autopsy this edema was found to be lardaceous and not to pit on pressure. In the nervous system, gray patches were found in cerebellum and bulb, a few in the cerebrum and very numerous in the spinal cord especially in the dorsal lumbar. Some of these, especially one in the sacral region, had a reddish tinge and projected from the surrounding tissue upon section. Some of these patches were badly limited passing insensibly into the neighboring tissue. They consisted of neuroglia generally in the form of a network sometimes with numerous nuclei, often with more fibers in the center and quite areolar where the lesion appeared to be diffusing into the surrounding tissues. In the latter, the myelin was varicose and stained badly, but had not disappeared. In some portions the destruction of the myelin was out of all proportion to the neuroglia proliferation, which leads the authors to believe that the former may be a secondary process.

In these areas, the nerve cells were much altered, and even the axis cylinders could not be distinguished in the more fibrous patches and were varicosed and altered at the periphery. The vessels were increased in number, had thicker walls, and contracted lumina sometimes quite obliterated, and round the neuroglia nuclei were more abundant. In places there were narrow disintegrated zones or even cavities and occasional hemorrhages.

The meninges showed some areas of slight thickening and occasional clusters of small round cells. Many of the muscles were degenerated, the liver showed exudates of round cells in the portal spaces and slight connective tissue proliferation. The kidney was intensely congested, slightly sclerosed, and showed desquamative epithelium in several places. The suprarenals were congested and much infiltrated by leucocytes.

The authors discuss the pathogenesis of these appearances, demanding whether they are those of a primitive multiple sclerosis on which is implanted a secondary myelitis or whether they are not all due to the same toxi-infectious process in favor of which they emphasize the visceral lesions and the state of the blood vessels in and around the patches. It may be remarked that the clear demonstration in this case of an evanescent lymphocytosis disposes of the contention that some of the cases of multiple sclerosis in which Babinski had observed a lymphocytosis were the pseudo sclerosis en plaques of cerebro-spinal syphilis.

TOM A. WILLIAMS (Washington, D. C.).

ROOT GANGLION COMPRESSION IN CORD TUMORS. Le Jonne (*L'Encephale*, Vol. II, No. 3).

This valuable study is founded upon 15 cases of cerebral tumor examined in the laboratory of Raymond. All the cases had been studied clinically with that care characteristic of the clinic Charcot. The author

points out how in many cases no symptoms draw attention to the increased pressure in the spinal portion of the thecal sack; but that a careful inquiry usually elicits evidence of the symptoms until they are masked by the graver cerebral ones. Some slight pains at the neck, a little numbness of the arms or legs or a disagreeable wet sensation in the morning, the diminution, followed by the disappearance, of the patellar reflex followed by those of the arm.

Such symptoms as incoordination and vascillating walk are, however, difficult to distinguish from those derived from the disturbance of the cerebellum usually present; but radicular sensory troubles are pathognomonic, subjective or objective even, though their limits are not absolutely precise. He points out the invariability of these, once constituted and the great importance of the diminished sensibility to vibratory impressions. In one case, gastric and intestinal crises occurred, but though any or all of these symptoms fail, the manometric pressure of the cerebral spinal fluid is always increased in amount by two or three times and should always be sought if any diagnostic doubt arises, as this does not occur in tabes, general paralysis, Pott's disease, multiple sclerosis, which may give rise to similar signs. The author differs from Sicard, for he believes fallacious the estimation of increased pressure without the manometer.

The lesions he has found have in all cases been of the same type and at the same situation, at the point established in 1894 by Nageotte. He however differs from Nageotte as regards the pathogenesis of the changes found. We find dropsy of the dural canal, of the ganglia and of the radicular nerve, sometimes indeed, almost cystic in extent. The nerve fibers instead of being closely packed together are separated one from the other. This condition is aggravated in proportion as one approaches the nerve of conjugation. Some of the fibers are even flattened. It is the posterior root which is the more affected. The author agrees with Sicard and Cestan in believing this due to the greater compactness of the former. For these appearances it is not necessary to invoke the toxi-infectious mechanism of Nageotte. The circulatory troubles are minimal, and the author has never observed that proliferation of connective tissue cells upon which Nageotte insists, nor the peri-neuritis, endo-neuritis nor infectious phlebitis also described by the latter. He believes these must have been due in Nageotte's two cases to a coincident infection.

This mechanical distension is most marked in the cervical region but varies from root to root, perhaps on account of individual physical arrangement. The effect on the nerve fibers themselves may either be local or at a distance and does not differ from that described by Batten and Collier, and Nageotte. The process begins by a granular disintegration of the myelin, rarely affecting its whole thickness, but "*corps granuleux*" are never found in the peri-vascular lymphatics. There may be a few small granules in the axis-cylinders; later on the demyelination is complete and sometimes even the axis-cylinders become swollen and fascicular. Sometimes they are small, flattened and in folds; they never disappear. These lesions are proportional to the mechanical dislocation of the connective tissue. Cellular lesions in the ganglia are not apparent. In the cord the lesion is limited to the cornu-radicular zones. It is when the large fibers spread themselves out from the root, however, that the lesions are

most marked. The cornu commissural zone is normal, as are the endogenous fibers, while the short and medium fibers seem less affected than the spino-medullary. Lissauer's tract is spared. Everywhere the axis-cylinder persists. There is no sclerosis, and the neural lesions resemble those described in the root. The author did not find the degeneration of the direct cerebellar tract described by Batten and Collier, nor did he find the changes in the anterior horn described by Myer, Pick, Hoffman, etc. He never observed the dilatation of the central canal described by Homen. As regards the pathogenesis, he thinks it useless to discuss the old theories, for their authors were unaware of radicular lesions.

Lejonne subscribes to the doctrine of Nageotte, "*Les alterations des racines postérieures dans la moelle sont causées par l'action de la lésion primitive située dans les nerfs radiculaires.*" But he thinks that any toxic or infectious factor must be very rare; for he has made cultures and has injected animals, and has never found the least evidence of such, the liquid has always been clear, has left no clot, and has been practically free from cells. The reader is referred to the admirable illustrations of the article for the evidence of the mechanical nature of the infiltration there shown, where the intra-fascicular spaces, virtual in the normal state, are enlarged by the pressure and the appearances described are beautifully figured. He was unable by experiments upon dogs to produce similar lesions; for he was unable to devise measures to prevent the rapid absorption of the excess of liquid; but he believes he has already offered enough evidence to differentiate the pathogenesis of these changes from the apparently similar ones occurring in pernicious anemia and other cachexiæ, and above all in tabes dorsalis. The history of seven of the cases is given.

TOM A. WILLIAMS.

IDIOGAMY. Paul Mantagazza (*Zeitschrift f. Sexualwissenschaft*. Vol. I., 1908, No. 4).

By idiogamy the author understands a complete or almost complete sexual impotence with all women except with one's wife or with some definite women. A strong young man of no matter what race when in a condition of plethora spermatica is able to have sexual congress with almost any woman, be she pretty or ugly, young or old, though there may not be the slightest sympathy between them. The relations of husband and wife are subject to many psychical elements, especially of an esthetic nature, which are liable to disturb or hinder sexual union. The more automatic and animal-like the act, the more its resemblance to an outburst, the better and healthier is the union. It might be more human than animal, but it will mostly be at the cost of love and posterity. In some the predilection for beauty is so enormous that it dominates their strongest desires. Such aristocrats of love are powerless in the presence of not pretty women. They can only have relations with pretty or with the prettiest of women because they must at the same time satisfy their esthetic tastes. The ideal of a perfect love would be, to be in position to choose one woman out of thousands who should correspond more than any other to our esthetic tastes, to possess her only and never evince any desire for any other. This ideal is not at all impossible; it is more often realized than we imagine. But it is not always due to a refined esthetic or a highly developed morale of the one who strives to bring it about; it is mostly due to the fact that we are unable to have anything to do with