inner vertical margin was removed a little farther from the vertebral column than that of the left. The right supra-scapular fossa was less full than the left, while the right infra-scapular fossa was distinctly excavated. The rhomboids, the levator anguli scapulae, the trapezius, and the serratus were functionally normal and responded to electric stimulation. Despite non-involvement of the right deltoid, the patient was able to elevate the right arm with ease only to a horizontal level. By a further effort, however, he could raise the arm to a vertical position. It was evident that this was brought about only by an extra strain upon the deltoid and upper portion of the trapezius, as if in an endeavor to overcome some obstacle. The success of this effort was indicated by a visible and palpable sudden movement, after the occurrence of which the arm could be brought to the vertical position. The explanation offered for this state of affairs is that, by reason of the paralysis and atrophy of the supra-spinatus, the head of the humerus was not retained within the glenoid cavity, and that in raising the arm the head of the bone came in contact with the margin of the cavity—the interference thus encountered being overcome by the extra effort of the deltoid; the further progress of the arm was permitted as soon as the head of the humerus slipped into the glenoid cavity. External rotation of the arm was also impeded. In sewing as well there was difficulty in directing the needle outward; but no difficulty in writing had been observed. The arm could be brought well backward. The infra-spinatus muscle failed to respond to all electric stimulation. It is believed that there must have been an isolated degenerative inflammation of the right supra-scapular nerve, with consequent palsy and wasting of the supra-spinatus and infra-spinatus muscles. The affection would appear to be a rare one, for Bernhardt has observed but one other case, and he has been able to find but four additional recorded cases.

THE NATURE OF MUSCULAR RHEUMATISM.

LEUBE (*Deutsche med. Wochenschrift*, 1894, No. 1, p. 1), as a result of an experience with some two hundred cases, arrives at the conclusion that muscular rheumatism is an infectious disease, perhaps dependent upon an attenuated form of the micro-organisms upon which it is believed that acute articular rheumatism depends. Pathologic evidence in support of this hypothesis is wanting, as muscular rheumatism is not a mortal disease, but the clinical facts are in its favor. The onset of muscular rheumatism varies in different cases. In some instances the pains in the muscles are preceded by a sense of fatigue, loss of appetite, headache, vertigo, and general malaise, and sometimes there is prodromal fever. As a rule, however, severe pain sets in abruptly as the first symptom. It is not notable when the affected part is at rest, but is induced by movement. The muscles successively involved are not necessarily contiguous or related in function; on the contrary, they may be remote from the seat of primary involvement. In about two-thirds of the cases observed the course of the attack was febrile; the remainder presented febrile manifestations of varying degree and type. In one-sixth of the cases cardiac murmurs were audible when the patients came under observation. It is, however, not implied that in all of these cases a relation existed between the rheumatism and the endocardial lesion; but in more

than half the number the murmur grew fainter or disappeared entirely in the course of observation; besides, while only one-third of the whole number of cases were attended with fever, two-thirds of the cases associated with endocarditis presented febrile manifestations. In three of the cases, however, in which the signs of endocarditis were not present when the patients came under observation, such signs made their appearance in the course of the attack of muscular rheumatism. That there is some relation between articular and muscular rheumatism would appear indicated by their frequent coexistence; while the occasional occurrence of groups of cases would suggest an infectious origin.

INTRA-CRANIAL HYDATIDS.

CLARKE (*Brain*, Part lxiii. p. 424) has reported the case of a man, twenty-nine years old, who for eighteen months had been having occasional epileptiform attacks, in which consciousness was lost and the tongue was bitten. For twelve months there had been progressive loss of power upon the left side of the body. Twice within a period of six months there had been attacks of pain in the left eye, with double vision. Three weeks before coming under observation the man had been seized with violent pain in the left temple, radiating over the left side of the head to the occipital region, and which had persisted. He seemed dull and was drowsy, but could not sleep, and took no notice of what was going on about him. He could scarcely walk, and dragged the left leg. The wrinkles of the left side of the forehead were somewhat smoothed out; the right eye could be screwed up a little more tightly than the left, and on smiling the mouth was drawn to the right. The localization of sensations, both tactile and painful, was impaired upon the left side of the face, while thermic sensibility was unchanged. The tongue was protruded straight. There was some drooping of the left upper eyelid. The left pupil was larger than the right and did not react to light. There was optic neuritis of moderate intensity in both eyes. The power of localizing sensations was impaired upon the left side of the body, but sensibility was otherwise preserved. There was incontinence of urine, which was free from albumin. The left knee-jerk was exaggerated, but there was no ankle clonus. There was no evidence of disease of the thoracic or abdominal organs. In the course of a week the ptosis on the left side had become more marked, and the left external rectus was paralyzed; the optic neuritis had increased, but some power had been regained in the left arm and leg. Two weeks later the left eye was completely paralyzed and immovable and there was cycloplegia and nearly complete loss of vision; there was additionally some convulsive twitching of the left hand. After the lapse of another two weeks the right internal rectus was paralyzed and vision was lost in the nasal half of the right visual field, while even light-perception was lost in the left eye. Muscular wasting was now evident in the left arm and leg, and reactions of degeneration were present. During the month that followed a remarkable degree of improvement took place in the paralytic symptoms, although the mental condition grew steadily worse. During this time a convulsion took place, in which the muscular twitchings began in the left hand, spread to the left side of the face, and then became general. Soon after this the

man became much worse, lay in a stuporous condition, and could not masticate his food. There was now rigid spasm of the left arm and leg. Sensation was lost upon the left eyeball, and marked unilateral sweating took place upon the right side of the face, head, and trunk. The head and eyes were turned to the right, and the right pulse was distinctly larger than the left. Death took place in coma, the temperature, which had never exceeded 99° during the progress of the case, reaching 105° shortly before death. The treatment consisted in the administration of potassic iodide, with mercurial inunctions, and hypodermatic injections of morphine for the relief of pain. At the post-mortem examination a large hydatid cyst, containing several daughter-cysts, was found in the posterior part of the left cerebral hemisphere. The cavity measured three inches in the antero-posterior, and two inches in the vertical and transverse diameters. Its walls were smooth and rounded, and showed no signs of inflammatory changes. It thus occupied and replaced the greater part of the white matter of the parietal and occipital lobes. It came nearest to the surface above, under the anterior part of the superior parietal and the upper and upper mesial portions of the ascending parietal convolutions. In this situation the pia mater was firmly adherent to the cortex, the gray matter of which was reduced to a layer about one-twelfth inch thick. The cortex had undergone most extensive atrophy under that part of the ascending parietal convolution which was concerned in the movements of the arm, and here the ascending frontal convolution was also encroached upon for a short distance. The boundaries of the cyst were sharply defined and surrounded at all other parts but those named by healthy white matter, a broad layer of healthy white substance intervening between it and the cortex. A second cyst, as large as a hazel-nut, was found at the back of the left orbit, lying between the anterior clinoid process and the sella Turcica, just posterior to the sphenoidal fissure and the optic foramen. This had compressed and destroyed the left optic nerve and the motor nerves of the eyeball. All other parts of the brain were healthy. Other cysts were found in the spleen and kidneys. The upper part of the cervical region of the spinal cord was not preserved, but throughout the remainder of the cord well-marked degeneration of the left crossed pyramidal tract was found. The nerve fibres had been largely destroyed, but the sclerosis was of moderate intensity. Sections stained in carmine showed numerous spider-cells. On carefully comparing the two sides in a number of sections the motor cells of the anterior cornu were found to be less in number upon the left than upon the right; some had undergone atrophy; others appeared granular and swollen, with loss of their processes. On the left side also the cells were more deeply pigmented and there was a larger amount of pigment in cells thus affected, the nucleus often being obscured. The vessels in the left cornu were more injected and the perivascular sheaths were distended. In some sections there appeared to be a diminution in the fine myelinated fibrils of the gray matter of the left anterior cornu. These changes were more evident in the lower cervical and upper dorsal regions than in the lumbar and sacral portions of the cord. In some sections the alterations were slight, and in most individual sections might easily be overlooked; it was only by comparing the two cornua in a very large number of sections taken from different levels that it became apparent that there was an evident

though partial change in the motor cells of the left cornu throughout the cord. When compared with the right side, sections of some of the left anterior roots showed disappearance of some nerve fibres.

PRIMARY SARCOMA OF THE STOMACH.

WESTPHALEN (*St. Petersburger medicinische Wochenschrift*, 1893, No. 45, p. 403) has reported the case of a man, twenty-eight years old, who for about a year had complained of intense epigastric pain, independent of the taking of food, occurring sometimes shortly before eating, at other times six or seven hours after eating, and occasionally during the night. At times vomiting took place, particularly early in the morning, with the ejection of mucus and acid liquid. Meat and coarse starchy food were less well borne than other articles of diet. There was no history of previous alcoholic excess, of gonorrhoea and of syphilis. The patient had lost seventy pounds in weight in a year. The nutrition, nevertheless, appeared fairly well preserved, and the anaemia was not conspicuous. Upon palpation a sense of resistance was appreciated to the left of the median line, several fingerbreadths above the level of the umbilicus. The dulness elicited upon percussion was lost in that of the liver, but was separable from that of the spleen. The patient believed that this condition, together with digestive derangement, had been present for a year, progressing but very gradually. Investigation disclosed a condition of gastroparesis; gastric motility and absorption were somewhat delayed, tardy; the acidity of the gastric secretion was diminished, hydrochloric acid ultimately disappearing. The diagnosis remained doubtful until, on one occasion, when the gastric contents were expressed an hour after the ingestion of a glass of ice-water, a bit of tissue was found which, on microscopic examination, displayed the histologic appearances of a round-celled sarcoma. Operation was advised and undertaken, but the growth proved to be too extensive to permit of its removal. The patient lived for a month longer. Upon post-mortem examination, the walls of the stomach were found to be thickened and the muscular structure in many places almost entirely wanting and replaced by tissue of a medullary and gelatinous appearance. The mucous surface was nodulated, some of the swellings being marked by superficial ulceration. A number of small nodules were also present in the small omentum. There was, besides, bilateral pleuropneumonia, with effusion. Microscopic examination demonstrated the neoplastic formations to be of the nature of myxo-sarcoma.

THE VARIETIES OF PERIPHERAL NEURITIS.

CRAMER (*Centralblatt f. allgem. Pathologie u. patholog. Anatomie*, No. 22, 23, B. iv. p. 914), as a result of a careful analysis of the literature of the subject, concludes that a classification of peripheral neuritis, based upon the anatomic lesions, is at present impossible, nor can the clinical features be explained by the anatomic lesions. In accordance with their etiology cases of peripheral neuritis may be classified into infectious, toxic, and dyscrasic, presenting respectively distinguishing characteristics, both as to course and pathologic anatomy. Infectious neuritis is but rarely latent, but is rather