On the Origin and Treatment of Paralysis due to Pott's Disease of the Vertebrae.

Tillmanns records the results in eleven cases of pressure paralysis in which operative treatment was carried out. He holds the following views on the pathology and treatment of the condition:

Paralysis due to bony pressure in tuberculous spondylitis is less common than was formerly supposed; it may, however, be caused by a projecting edge of bone in the vertebral canal becoming adherent to the spinal cord. In such cases there is not necessarily any narrowing of the spinal canal. It may also, though very rarely, be due to a dislocated sequestrum, and in old-standing cases a new formation of bone may take place during the healing process and lead to a narrowing of the spinal canal sufficient to cause paralysis. This last is an important etiological factor in pressure paralysis.

In other cases, where the tuberculous process has been arrested, paralysis may be caused by the pressure of peridural connective tissue. The most common of all causes of paralysis, however, are peridural exudate, abscesses, caseous material, and peripachymeningitic granulations.

The pressure causes either a local atrophy of nerve elements in the cord, or circulatory disturbances, such as anaemia, venous or lymphatic obstruction. The microscope shows that the nerve elements at the site of the pressure are destroyed and replaced by connective tissue. The possibility of recovery depends more on the nature and intensity of the pressure than on its duration.

In all cases of spondylitic paralysis, bloodless methods of treatment by extension, fixation, and gradual reduction of the deformity are first to be tried. Calot's method of reduction may be suitable for fairly early cases, in which the curve is not yet fixed, but with the important limitation that the reduction must not be carried out at one sitting, but gradually, without operation and by bloodless methods. Operative treatment should be considered only after other measures have failed. In operating, the seat of disease may be reached by exposing the vertebral bodies from the side, as by Ménard's costo-transversectomy, or from behind, after opening the spinal canal by laminectomy. The tuberculous material should be carefully scraped away and the cavity washed, and after the lateral operation, drained. The lateral route is the method of choice in cases of active disease of the vertebral bodies, and in cases where pressure by sequestra or exudates is indicated, while laminectomy should be done for caries of the vertebral arches and in cases in which
compression may be due to regenerated bone, to a bony projection adhering to the dura, or to connective tissue growth. No drain should be used after laminectomy, but the lower end of the wound may be left open to allow of escape of blood. After operative treatment, prolonged orthopaedic treatment is required. The ultimate results in eleven cases where operation was done were not encouraging, although in ten cases operation resulted in immediate benefit. Only three of the patients survived at the time of writing, the others having died at varying times, within two and three quarter years of the date of operation, from tuberculosis or its results.

It is as yet impossible to lay down general rules for the operative and non-operative treatment of all cases of spondylitic paralysis, though it is to be hoped that better results may be obtained in the future, when the means of arriving at an exact anatomico-pathological diagnosis are more perfect.—Arch. f. klin. Chir., Berlin, Bd lxix. Hefte 1 and 2.

PRIMARY CARCINOMA OF THE APPENDIX.

Moschcowitz contributes a valuable paper on the subject of primary carcinoma of the appendix, a condition which has only been recognised within recent years, and of which only about twenty cases are on record. The present paper contains the reports of three new cases. After a full discussion of the subject in all its bearings, the author concludes that we have not yet reached a stage when we can recognise the disease prior to operation, or, for that matter, even after operation, before the microscopical examination. The disease is extremely rare, compared to inflammatory affections, but it is possible that, in the absence of systematic microscopic examination of the appendix after removal, many cases are overlooked. In the last few years more and more cases have been reported. It appears that all primary carcinomas of the appendix begin in the mucosa, and it is more than probable that they all take their origin in some preceding inflammatory process. It is most frequent at that time of life in which inflammatory diseases of the appendix are most frequent. This accounts for the comparatively early age of most of the patients reported. The disease appears to be more frequent in the female than in the male, the ratio being three to one. The author suggests that, if it be proved that the carcinoma originates in an inflammatory process, we have an additional argument for the removal of the appendix once it is the seat of disease.—Ann. Surg., Phila., June, 1903.

PATHOLOGY OF SO-CALLED BONE ANEURYSMS.

Gaylord (Ann. Surg., Phila., June, 1903) reviews the literature of this subject, and adds a case of his own. His conclusion is that in all probability the greater portion, if not all, of the cases of bone aneurysm were originally medullary sarcomata. He agrees with Gentilhomme that, while these tumours may present the characteristics of aneurysms, their etiology and the mechanism of their development have little in common with that affection. He suggests that the term bone aneurysm should
be dropped, and that of pulsating sarcomatous haematoma of bone should be substituted for it.

THE GERMIcIDAL ACTION OF ALCOHOL

The investigation carried out by Harrington and Walker (Boston Med. and Surg. Journ., May 21, 1903) was designed to test the value of alcohol as a germicide, particularly in relation to the purification of the skin. They used a wide variety of pathogenic organisms, including those generally recognised as weakly, moderately, and strongly resistant to chemical disinfectants. They come to the following conclusions:—(1) Against dry bacteria, absolute alcohol (99 per cent. by volume), and ordinary commercial alcohol (94 per cent. by volume) are wholly devoid of bactericidal power, even with twenty-four hours' direct contact, and other preparations of alcohol containing more than 70 per cent., by volume, are effective within five minutes, and certain preparations within one minute. (2) Against the commoner, non-sporing pathogenic bacteria in a moist condition, any strength of alcohol above 40 per cent., by volume, is effective within less than 4 minutes. (3) Alcohol less than 40 per cent. strength is too slow in action and too uncertain in results against pathogenic bacteria, whether moist or dry. (4) The most effective dilutions of alcohol against the strongly resistant (non-sporing) bacteria, such as the pus organisms in the dry state, are those containing from 60 to 70 per cent., by volume, which strengths are equally efficient against the same organisms in a moist condition. (5) Unless the bacterial envelope contains a certain amount of moisture, it is impervious to strong alcohol; but dried bacteria, when brought into contact with dilute alcohol containing from 30 to 60 per cent. of water, by volume, will absorb the necessary amount of water therefrom very quickly, and then the alcohol itself can reach the cell protoplasm and destroy it. (6) The stronger preparations of alcohol possess no advantage over 60 to 70 per cent. preparations, even when the bacteria are moist; therefore, and since they are inert against dry bacteria, they should not be employed at all as a means of securing an aseptic condition of the skin. (7) Provided the skin bacteria in the deeper parts can be brought into contact with disinfectants, alcohol of 60 to 70 per cent. strength may be depended upon usually, but not always, to destroy them within five minutes.

GLYCOsURIA IN BURNS.

Vannini publishes six observations on burns of varying degrees of severity, in all of which glycosuria was present. The glycosuria is as a rule transitory, and is in all probability toxic in its origin, and connected with hyperglycaemia. He suggests that when sugar is present after burns, the diet of the patient should be modified.—Ann. d. mal. d. org. genito-urin., Paris, June 15, 1903.