

was there any increase in cells, the cell count never exceeding a total of 7 per c.m. Lymphocytes were always the predominant type of cell; indeed in all but one case the only type present. The reduction of Fehling's solution was normal in all 6 fluids.

Macroscopically the fluids were clear and transparent. In most instances a slight hypertension seemed to exist as indicated by the increased rapidity of flow through the needle and by a positive Macewen sign. Providing the fluid were removed slowly and in small quantities there were no detrimental effects observed. In fact, it was thought that at times slight improvement occurred in the condition of the patient following rachicentesis. This led to further work upon the treatment of diphtheritic paralysis by the intramuscular injection of diphtheria antitoxin followed in 24 to 48 hours by a lumbar puncture and the injection of normal horse serum. This will be discussed in a later paper.

The spinal fluids were taken at various stages in the disease from a period shortly after paralysis developed in some cases, until just preceding or following death in others. It seemed rather doubtful therefore that a transient meningeal reaction could exist and yet leave no trace at the diverse periods of the disease in which punctures were performed. It is instructive to note that all the patients in the series were suffering from a grave and usually mortal type of paralysis, a type in which central involvement of the nervous system could be most expected.

*Slow Intravenous Injection of Antiserum to Prevent Acute Anaphylactic Shock.* Julian H. Lewis, Chicago, Ill. The Journal of the American Medical Association, Vol. 72, No. 5, February 1, 1919, p. 329.

When large amounts of serum are given intravenously to patients, as in the serum treatment of pneumonia and severe cases of diphtheria and tetanus, there is always a danger of severe and fatal anaphylaxis reactions. These may occur not only in those who have received previous injections of horse serum, but also in those receiving it for the first time. Of all the methods suggested to minimize this danger, that of Friedberger and Mita seems best suited. It consists of injecting the diluted antiserum intravenously very slowly and over a period of several hours. Lewis uses for this purpose the Woodyatt pump, which is essentially a Leur syringe operated by an electric motor and whose rate of injection can be accurately regulated. To prove the efficacy of the method, animals highly sensitized to horse serum are injected intravenously with horse serum with the Woodyatt pump without manifesting anaphylactic symptoms.

*Psychoanalysis.* Frederick J. Farnell, Providence, R. I. New York Medical Journal, Vol. 108, No. 24, December, 1918, p. 1018.

The author attempts to describe that each individual possesses a moral code distinctly his own and that all analytical processes should be investigated from the standpoint of the patient's moral code. The problem not only ends in a complete analysis of the patient, but also it is

quite necessary and distinctly advantageous to the patient that he be placed back in society properly adjusted. Many cases of analysis fall short in their ultimate recovery by an inability on the part of the patient to continue in society as a social product notwithstanding the complete analysis. He further emphasizes the fact that "nature quietly asks room for the operation of her laws, and if it is not given she takes it and you take the consequences." It is in this sphere that the psychophysical and psychosexual manifestations of disturbed personality and make-up are present, and it is at them that the examiner should aim and with a solution or a compromise. He divides the analysis into groups, depending upon their conscious or unconscious wish to obtain a recovery, and it is in those whose moral code is moldable both consciously and unconsciously that the analysis reaps its greatest benefit. He also indicates that many times the mental conflict of the examiner and his moral code often interfere with the proper adjustment of the patient and that should an analysis fail in not reaching a recovery in his patients, it is best that he "look at himself" and seek an analysis at the same time. At the present time there is no doubt of its great value in neuroses and psychoneuroses and should be considered as a part of the armamentarium of all psychiatrists.

*Extrameningeal Meningococcus Infections.* W. W. Herrick, New York, N. Y. Archives of Internal Medicine, Vol. 23, No. 4, April 15, 1919, p. 409.

Meningococcus infections, with rare exceptions, have heretofore been recognized only through the involvement of the meninges. This has naturally led to the general failure to apprehend the extrameningeal meningococcus infections, particularly the blood stream invasion or stage of sepsis preceding most—probably all—cases of meningococcus meningitis. In the recognition of this stage is the secret of early diagnosis and the rationale of intravenous serum treatment which has so effectually reduced mortality when properly carried out.

To emphasize the possibilities of extrameningeal invasion by the meningococcus, several cases are cited as types:

1. Fatal meningococcus sepsis without meningitis either clinically or at necropsy.
2. Fatal meningococcus sepsis, acute serous meningitis and acute pericarditis.
3. Subacute meningococcus sepsis without meningitis, septic arthritis, recovery under intravenous serum treatment.
4. Meningitis tarda with prolonged stage of meningococcus sepsis: meningitis a late development: recovery.
5. Local meningococcus involvement of the pleura.
6. Local involvement of the accessory nasal sinuses—both without meningitis.

A plea is made for the abandonment of the term "cerebrospinal meningitis" and the substitution of the general term "meningococcus infection," with meningococcus meningitis to denote the usual meningeal localization.