THE DIAGNOSIS OF ABORTIVE CEREBRO-SPINAL MENINGITIS.

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ABORTIVE cases of cerebro-spinal meningitis are mentioned in the textbooks, but it is probable that many are overlooked by those whose mental picture of the disease is formed by their experience of the severe type.

In this district last winter the writer was able to

CHART A.—Patient reported sick with headache on the two days previous to admission. Puncture fluid contained diplococci and a few lymphocytes.

observe a series of cases ranging from the fulminant (proving fatal within twenty-four hours) to the mildest type where recovery is apparently complete by the end of a similar period. Though the mild cases form a series continuous with the severe, yet, as the disease assumes a benign form, a certain sign appears which seems of diagnostic value.

This mild or abortive type starts with a headache and evanescent meningeal irritation, as shown by a stiff neck

CHART B.—Rigor two days before admission. Pains in head and neck. Face flushed and Kernig's sign present. Puncture fluid apparently normal. Herpes on lips twelve days after onset.

and Kernig's sign. Lumbar puncture at this stage may reveal a few pus cells (chiefly lymphocytes as opposed to the polymorphonuclear cells in the severer cases) and an occasional diplococcus, or may be negative. There is a rise of temperature, to which the pulse-rate is often unrelated, but within two or three days or even less the temperature and pulse become normal and the patient seems well.

If, however, a careful watch is kept the pulse-rate will be found to drop at some time between the second and seventh day after the onset. This drop may be to as low as 60 a minute and often as low as 50, and lasts a variable time, from a few readings only up to a week, with occasional increases. If the patient is allowed up whilst the pulse is slow, he complains of feeling poorly or "fuzzy in the head," and the pulse-rate does not increase.

This sign was almost invariably present in the cases in which there were clinical grounds for the diagnosis, even when lumbar puncture gave a clear fluid.

Slowing of the pulse is said to occur during convalescence from febrile illnesses, but such a slowing as is shown on the accompanying charts seems characteristic of recovery from a mild cerebro-spinal meningitis, and should be useful confirmation of a doubtful diagnosis.

An interesting case occurred in a ward orderly. He reported sick; his pulse-rate was 56; he had no headache, but volunteered a history of a bad headache three days before. His pulse remained slow for a week, and made occasional excursions to or below 60 in the week following, finally reaching his normal rate of about 80. It is probable that other signs would have been found if he had reported sick with his headache. Another man (Chart A) had reported sick on two successive mornings with headache. His medical officer then met the writer, heard his views, and mentioned the case. The man was sent to hospital, and lymphocytes and diplococci were found in his spinal fluid.

CHART C.—Onset day before admission; vomiting and headache. Face flushed; one purpuric spot on his back. Kernig's sign marked. Spinal fluid under pressure: watery, but contained diplococci. Labial herpes three days after onset.

The number of mild cases seen cannot be given, for some were certainly missed early in the epidemic, and there is no definite demarcation from the severe, but one may say that about twelve were recognized which the ordinary observer would not have believed to be a form of meningitis. They seemed commoner at the end of the epidemic, but that may have been because they were more often detected.

It is the opinion of the writer that many escape diagnosis, and it is necessary for the study of the disease

CHART D.—Onset three days before admission. Headache, stiff neck, and Kernig's sign. Puncture fluid apparently normal.

that they should be detected; it is for this reason that these observations are placed on record to be confirmed or confuted.

I have to thank Captain Leon, R.A.M.C.(T.), for the bacteriological work in connexion with the whole series of cases.

THE seventh Pan-American Medical Congress, recently held at San Francisco, passed resolutions calling for the appointment by the various American Governments of a Commission for the systematic investigation of the medicinal flora of America. The view was expressed that this investigation should be conducted in connexion with recognized universities, hospitals and laboratories in the various countries, and in the instance of each article investigated should embrace: (1) A description of the plant; (2) its botanical classification; (3) its habitat, including the possibility of acclimatization and cultivating; (4) methods of gathering and transportation; (5) alkaloidal and other chemical properties; (6) present uses, domestic and professional; (7) pharmacological investigation, with experimental and subsequent clinical data; (8) the probable value of the plant as an article of commerce; (9) additional facts of value as may be demanded by the Commission or determined by individual investigators.