removed from the right side for examination. She was again seen on January 28, when there was definite ulceration of the right vestibule involving the outer wall, ventricle, and a small area of the adjacent septum. The left inferior turbinal remains practically stationary.

Dr. Pegler said he hoped Mr. Graham would add the statement that tubercle bacilli had been found in the tissues, and congratulated Mr. Graham on his success.

Mr. Graham replied that the credit of finding the tubercle bacilli was due to Dr. Kettle.

Tuberculous Ulcer of the Mouth.—H. Buckland Jones.—W. M., a male, aged thirty, came to hospital on December 31 last, complaining of ulceration of the mouth, which he had been troubled with on and off for twelve months. On examination a large ulcer with indurated edges was found in the region of right inferior wisdom tooth admitting the tip of the finger and spreading on the adjoining cheek. Some enlarged glands were found on both sides of the neck in front of the sternomastoid. There was a history of a cough and wasting for twelve months. On examination of the chest there was slight dulness over the right apex with prolonged expiration, some bronchophony, and a few coarse crepitations. There was no history of syphilis. A piece of tissue was examined by Dr. Leatham showing numerous giant cells, but no tubercle bacilli. No sputum has been available for examination.

(Unfortunately this patient died of tuberculous meningitis a few days before the meeting.)

Abstracts.

CEREBRO-SPINAL MENINGITIS.


This paper is the outcome of work in the Aldershot command. Cerebro-spinal meningitis is discussed in its three stages: (1) Catarrhal, (2) septicemic, and (3) meningeal. The first stage is usually detected almost by accident; by examination of all the men sleeping in the room where a case has occurred. The authors use West’s swabs, from which they inoculate plates of “nasgar” medium. They find that all carriers have catarrh. Stage 2 is that febrile condition which is undiagnosable, unless it passes on to stage 3. In their conclusions the authors state that the disease is more widespread than is usually recognised; it gives warning of its onset by catarrhal symptoms and often goes no further. In its second stage it may run a long non-malignant course. As an adjuvant to spraying and swabbing treatment, an autogenous vaccine is recommended.

Macleod Yearsley.


The author points out that one of the most outstanding features of epidemics is the isolation or want of ascertained contact between the cases of the disease. Two explanations suggested themselves: (1) An infective
material widely distributed outside the body and remaining active some
time (contradicted by the sensitiveness of the meningococcus to ordinary
air). (2) Carriers. The latter are discussed in some detail. The portal
of entry of the disease is undoubtedly the naso-pharynx. The method
for investigating carriers is described, and it is suggested that they
should be isolated. The total number of persons who harbour the meningo-
coccus should be looked upon as constituting the true epidemic.

Macleod Yearsley.

Host, E. C., Lakin, C. E., Benians, T. H. C.—Epidemic Cerebro-spinal

A preliminary note on the bacteriological study of the disease. This
paper is one which scarcely admits of abstraction. It asks the question:
Is the meningococcus the primary infective agent? and gives seven points
of evidence which supports the affirmative answer. This is followed by:
Is the meningococcus merely a phase of the causal organism? It is sug-
gested that at some phase in the life-history of the organism the latter
exists in so minute a form in the blood as to be able to pass through the
filter bed between the circulatory and cerebro-spinal systems. The author's
experiments with filtered urine show this is probable, and that in addition
to the detection and isolation of carriers, the urine of patients should be
disinfected.

Macleod Yearsley.

Foster, Capt. Michael.—Cerebro-spinal Fever: Diagnosis and Treatment.

The author's notes are drawn from his experience at the 1st Eastern
General Hospital at Cambridge, and embraces twenty-five cases, with a
mortality of 20 per cent. In nineteen the meningococcus was recovered
from the cerebro-spinal fluid; in the other six the diagnosis was indisput-
able clinically. A difficulty is that the micro-organism has to be culti-
vated from the fluid. Symptoms are discussed under the heads of: (1)
Retraction of the head; (2) rash; (3) implication of cranial nerves;
(4) mental condition; (5) facial aspect; (6) vomiting; (7) muscular
rigidity; (8) condition of the sphincters; (9) pyrexia.

As regards treatment, the excellent results of repeated lumbar punc-
ture are pointed out. Serum treatment gave no better results than
lumbar puncture alone.

Macleod Yearsley.

Embelton, D., and Peters, E. A.—Cerebro-spinal Fever and the Sphen-

The authors publish these cases to show that empyema of the sphenoid
sinus has a relation, and probably a causal relation, to the infection
of cerebro-spinal fever. Their conclusions are: (1) Sphenoidal empyemas
is associated with cerebro-spinal fever in a causal manner. (2) Cerebro-
spinal fever is a meningitis due to organisms entering the meninges from
the sphenoidal sinus by way of the lymphatics. (3) Adults are less
susceptible owing to a diminished tendency to sphenoidal empyema, as
they are not prone to excessive swelling of the mucous membrane and so
to closure of the ostia, as is seen in adolescents. It may be advisable to
open the sphenoidal sinus in all cases of cerebro-spinal fever; it is certainly
advisable to treat the naso-pharynx on the lines used in one of the
published cases, when the nostrils were painted with umg. hyd. nit. dil.
5ss, menthol gr. 5, ol. olivæ ad. 3j, and the tonsils swabbed with
hydrogen peroxide.

Macleod Yearsley.