## GENERAL PARALYSIS.

## ITS CAUSE AND TREATMENT.

## By MISS L. GODDARD, S.R.N.

The word paralysis is used to express the loss of power of movement and sensation, but general paralysis, or paralytic dementia, also termed general paralysis of the insane, is due to degeneration of the cerebral blood vessels and atrophy of the central and frontal lobes of the brain, marked by progressive dementia.

the brain, marked by progressive dementia. It is also called parasyphilis when this disease is partly due to syphilis. The cause is usually syphilis, but there are other predisposing causes which may be overwork, excitement and in some cases shock, or the after effects of sunstroke or influenza, and after a recent cerebral injury. Another cause is undue stimulation by alcohol.

When syphilis is the cause changes take place in the spinal cord and peripheral nerves, and the toxins cause the degeneration in the nervous tissues. The spirochæte called treponema pallidum affects the tissues, causing the brain to weigh less than normal due to the atrophy which takes place.

Syphilis was known in Europe before 1494, and mention of it is to be found in some old Chinese records. It is said that the disease was treated like any other epidemic until the sixteenth century, when a Parisian physician named Fernel discovered its venereal nature. The disease reached Naples and spread to France and thence to England.

Paracelsus observed its hereditary character, but it was not until 1905 that Schaudium discovered the presence of the spirochæte in the lesions.

And later, in 1910, Professor Ehrlich of Frankfort discovered a compound that would destroy the parasite.

In general paralysis which is seen in the insane, if due to syphilis, gummata develops in the tertiary stage when it affects the brain and spinal cord, and since the introduction of the Wassermann reaction, it has been proved to be positive in about 95 per cent. of cases.

It was in the year 1798 that a former Superintendent of Bethlem brought to notice this disease, but it is only in recent years that it was accepted as a fact.

The symptoms may be unnoticed in both the primary and secondary stages, as the patient's history is usually above par, and as it does not affect the cortex cerebri for many years after the first infection, in some cases after ten years, or it may be noticed after five, or even 20 years later.

Gradually the patient will be losing weight, is irritable, moody and restless, complaining of headache, and there is inattention to work. In some cases the first signs are epileptiform or apoplectic seizures usually on the right side; the pupils are irregular in outline in the early stages. Speech becomes slurred and there is either over-friendliness or moral perversion, the patient is forgetful, and even the character changes.

Slowly from this stage the patient becomes excited or depressed, sleeplessness is often present, but maniacal states are frequent with delusions of grandeur and hallucinations of sight and hearing ; some even declare they are the Emperor or Empress of the world, and that they cannot count their millions. As the disease progresses so does the paresis, involving ultimately all the voluntary muscles; the bones become fragile, the patient feeble, euphonic and fatuous, and the finger nails become grooved. The gait becomes a scuffle, bladder and rectal symptoms occur and the patient may become bedridden if untreated.

Treatment.—The examination of the blood and the cerebro spinal fluid is most useful and necessary, and such tests commonly used are the colloidal gold reaction test, the Kahn test, the Ford Robertson Colquhoun, which is a precipitation test, generally used with the Kahn and Wassermann tests.

Malarial treatment will be given which arrests the disease and has shown much value. This treatment induces pyrexia artificially, the patient being placed in a gauze-wire protected room with inner protective doors. 5 cc. of infected blood is injected intramuscularly

5 cc. of infected blood is injected intramuscularly which counteracts the spirochæte, and may be aided by anti-syphilitic treatment with arsenic and mercury.

The nursing management consists of :-----

1. Morning and evening chart for temperature, pulse and respiration for the first seven days after inoculation of the infected blood, then four-hourly.

2. The exact time is marked on the chart of each occurrence of rigors and the temperature taken every half-hour, next day commencing one hour earlier than the day before.

3. Two blood films are taken during each rigor and a film taken if there is any increase in temperature, reaching 102° F. at any time.

After the first seven days a simple enema is given every day, and a specimen of urine sent to the laboratory daily.

Hydrotherapy, sponging with cold water every three hours for 20 minutes provided the temperature reaches or exceeds 103° F.

The skin should be rubbed vigorously, ice can be used for this purpose with benefit if the temperature exceeds  $104^{\circ}$  F.

Quinine dosage follows if the patient's condition requires it.

The room is kept well-ventilated at a temperature of  $60^{\circ}$  F., and the usual nursing care given and observation of stools.

The diet for an adult may consist of three pints of milk, rice, arrowroot, custard, fish and bread and butter.

## HONOURS FOR CANADIAN NURSES.

The Canadian Nurse records: The King's Birthday was a proud occasion for the nurses of Canada, for it brought well-merited recognition to many within our ranks. Miss Marion Lindeburgh, President of the Canadian Nurses' Association, has been appointed O.B.E.; Miss Mary R. Cameron, M.B.E.; the Rev. Sister Décary, Director of Nursing in Notre Dame Hospital, Montreal, has also had conferred upon her a similar honour which is shared by several in recognition of meritorious service in the war. The Royal Red Cross has been awarded to a number of leading officers of the R.C.A.M.C. and of the Nursing Service of the Royal Canadian Navy. These well-deserved honours are a strong professional link between the Services at home and in Canada.



