OUR PRIZE COMPETITION.

GIVE A SHORT DESCRIPTION OF THE SYMPTOMS AND SIGNS OF TUBERCULOSIS OF THE HIP JOINT AND THE NURSING IN ITS TREATMENT.

We have pleasure in awarding the prize this month to Miss V. Cordingley, 383, Middleton Road, Rhodes, near Manchester.

PRIZE PAPER.

Tuberculosis is a disease due to infection by the Tubercle bacillus, a slender, rod-shaped microbe, curved, and a little thickened at one end. It was discovered in 1882 by Koch.

Local infection causes abnormal changes to take place and the following describes the various stages of infection of the hip joint.

The disease first manifests itself either at the upper end of the femur or in the floor of the acetabulum, less commonly in the synovial membrane. Wherever it starts the three parts are soon infected.

There is a slow onset during which the capsule of the joint becomes filled with "cheesy" débris formed by the breaking down of infected structures. Ligaments and cartilages are slowly affected and destroyed so that the hip becomes easily dislocated by traction of the muscles.

Abscesses form in the joint and track to an outlet, the thigh, or more rarely up into the pelvis. It is usual to picture the progress of these changes in three stages.

(1) The synovial cavity becomes distended, there is pain in the hip and often in the knee. Sometimes pain is referred to in the knee only at this early stage. A limp develops. The thigh muscles begin to waste and the gluteal fold is flattened, the inguinal groove on the affected side is fuller, the leg is held in the position of greatest ease, i.e., flexion abduction and rotation outwards, and the thigh is moved with the pelvis, no movement taking place at the joint.

When the legs are put together the affected leg looks longer than its fellow. The back becomes arched, a lordosis in the lumbar region, and the pelvis tilted downwards to correct the flexion and abduction.

(2) Cartilages and ligaments are destroyed. It is at this stage "starting pains" at night are complained of, chiefly as the patient is preparing for sleep, owing to general relaxation of muscles, which are, during the destruction of the ligaments, working doubly hard. Pain increases and the leg is held rigid.

Adduction takes the place of abduction, flexion and rotation remaining.

Wasting of muscles is pronounced, and on putting the legs together the pelvis is now tilted upward on the affected side making this leg appear shorter.

(3) Bony destruction occurs. The head of the femur or the rim of the acetabulum are eaten away allowing the femur to slip outwards, upwards and backwards, so that shortening now is actual, and not due to tilting of the pelvis.

Abscesses appear termed "cold" abscesses, because as long as they remain unopened no active inflammatory symptoms occur, but if they burst they are infected externally, and hyperpyrexia may intervene.

TREATMENT.

Adequate treatment at an early stage may prevent progress of the disease.

Rest of affected part.

Action of light and exposure to fresh air. (A T.B. germ can live five to six weeks in the dark. Exposure to sunlight kills it in a few minutes).

Psychological treatment.

The latter three principles are the chief consideration in treatment, combined with care of the whole body and general toning up.

The patient is nursed on a firm mattress supported by fracture boards, and weight extension applied to the affected limb is kept up until it is pulled into good position. Anterior iliac spines are level, there is no tilting of the pelvis or arching of the back after efficient extension. Care must be taken to ensure that the spine is in contact with the bed along its entire length, a small pillow only being allowed for the head.

The weight of extension applied is, of course, ordered by the surgeon, usually 2 to 10 lb., depending on age and weight of the patient. Continuous action in the correct axis is more important than weight and this must be constantly kept in mind by the nurse.

Position of limb and pulley are adjusted as the deformity improves.

When the position is considered satisfactory the patient is nursed on a padded frame, and during this time great skill and watchfulness are demanded from the nurse to prevent pressure sores and maintain position. Localised pressure, if persistent, may cause destruction of tissue and has resulted in death, therefore this cannot be too strongly impressed.

At this stage it is important that the nurse understands her patient's mental outlook and adopts a correct attitude. An unhappy patient makes a long tedious cure and little adjustments for his happiness counteract his long inactive cure when it is easy to allow worry, real or imagined, to dominate his day.

Patients are kept on these frames 3–12 months, then a splint is applied which allows no movement of the hip joint. Thomas's hip splint is fitted and worn continuously at first, then as improvement is maintained, left off at night. When this splint is worn the patient is allowed to get up, the good leg being fitted with a patten to keep the foot of the affected leg off the ground.

Exposure to natural or artificial sunshine and fresh air, with good food and general tonics in combination with the above treatment usually result in cure. A common complication is ankylosis of the affected joint.

Amyloid disease and hyperpyrexia are dangerous complications to be guarded against if abscesses are allowed to develop. Therefore careful examination of the urine frequently for albumen, and recording of the temperature twice daily is necessary.

If the above treatment is ineffectual, surgical interference is necessary, when the joint is exposed and all diseased parts removed. Amputation through the hip joint may be necessary.

HONOURABLE MENTION.

The following competitors receive honourable mention, Miss Marion Wyrall and Miss Winifred Moss.

QUESTION FOR NEXT MONTH.

What precautions should be taken by a nurse to protect herself and others against infection when nursing (*a*) Enteric, (*b*) Cerebro-spinal Fever, (*c*) Gonorrhœa?

previous page next page