7. To take insulin himself and to know when to take it.
8. To state the dangers of (a) too much insulin and (b) of its total omission.
9. To care for his feet in order to avoid blood poisoning and gangrene which are fatal to many diabetics.

**ARTHRTIS**

_By Mr. S. JAMES, Student Nurse, Scudder Memorial Hospital, Ranipet_

Arthritis is a disease which may be classified into two, as Atrophic or Proliferative or Rheumatoid Arthritis; and Hypertrophic or Degenerative or Osteo Arthritis. The atrophic arthritis occurs below the age of forty and seems to be more common in women than men. When it develops in children it is known as 'Still's disease', and is very crippling, involving tremendous deformity of many joints. In this particular form of arthritis the whole body resistance is lowered, there is loss of weight and strength; extreme pain is present much of the time, due to inflammation and joint changes. The skin, muscles and bones are atrophied and tend to waste. It usually attacks smaller joints; eventually causing them to become stiffened or ankylosed.

The hypertrophic arthritis occurs in people of heavy type being more common in men than women. It is rarely seen in people under forty years of age. This form of disease attacks larger joints as knee, hip, spine etc., which are characterised by swelling, muscle atrophy, effusion may be present and the roentgenogram usually shows some tipping of the articular margins. The articular margin (space) is irregular with hyperostosis.

_Causes._ The cause of atrophic arthritis is not definitely known. It occurs in the slender type of individual, who may become fatigued to the point of exhaustion, over-work, nervous strain, faulty diet, improper living habits which are all considered important factors in the cause of this type of arthritis.

Hypertrophic arthritis is thought to be caused by chronic strain of a joint, due to heavy lifting and continual poor posture while standing or sitting.

_Symptoms._ Fatigue which may be both mental and physical limits the patient's activities and interests. This type of patient assumes a position requiring the least effort, thus developing a poor posture which leads to bad body mechanics. Because of the bad body mechanics, his bodily functions are slowed down and lowered resistance eventually develops involving digestive disturbances. When he tries to assume a good posture it will be very difficult requiring more energy and the result will be a strain. There is a lack of muscle tone of the intestines resulting in atomic constipation which may lead to the absorption of toxins into the blood stream. This acid content of the blood is increased and he develops poor appetite. The amount of oxygen taken into the lungs is lessened and he becomes an abdominal breather.

The extremities are cold due to ptosis of the abdominal organs causing constipation and slowing down of the general circulation. The glands of internal secretion are inhibited in their actions. There is extreme pain, swelling and soreness involving a limitation of joint movement. There is thickening of the synovial membrane followed by an increase of synovial fluid due to the inflammation, and contraction of the joint occurs as a result of bending the extremity for the relief of discomfort. As the disease progresses the cartilage is destroyed, synovia fills in between the joints, adhesions form followed by complete ankylosis.
Nursing Care and Treatment of Arthritis Patients

The treatment is directed towards the removal or modification of causative factors including focal infections and the correction of faulty physiology, underlying the disease.

During the period of rest in bed, a daily bath is necessary to improve the disturbed peripheral circulation. There is an increased perspiration of hands and feet giving rise to a disagreeable clammy feeling. Careful drying and powdering add to the comfort of the patient. The fingers and toes are frequently white and cold because of the inefficient circulation for which the patient is kept warm by providing him with hot water bottles and blankets. Care must be exercised to prevent the patient from chilling and exposure to cold. He is uncomfortable due to the limitation of the movements of his joints, and must be prevented from pressure sores by frequent turning and massaging the bony prominences.

The ward or room of an arthritic patient must be sunny and well ventilated but free from any direct current of air blowing over the patient. Fomentation three times daily to the swollen parts, to reduce the inflammation, will help a great deal. Helio-therapy or sun treatment is also employed.

Two fundamental things are to be considered in the treatment of this disease. First to build up the body resistance and secondly to remove the focal infection. The use of drugs as salicylates, aspirin, Pyramidon, etc., must be limited in arthritis as they will not cure the disease but merely relieve. Complete rest in bed in a comfortable position, prevention of deformities by plaster splints, and careful attention to the intake, which should consist of only vegetables and fruits with at least a pint of milk a day, are necessary for the rapid recovery from disease. The amount of sugars and starches must be limited, as they will tend to ferment in the intestines, causing an increased acidity in the blood. Mild laxatives as Petrolagar, liq. paraffin etc., for proper elimination, steam baths to encourage perspiration and general circulation and thus helping to rid the body, to some extent of acid. Passive and active movements should be gradually employed, more particularly active movements. The focal infections such as sinus, tonsils or teeth must be rooted out after the physical resistance is built up. Radiant heat is sometimes employed in the acute stage to relieve pain.

As arthritis is a chronic disease, the mental care is more important than the physical. So occupational therapy such as weaving, sewing, making baskets, drawing, variety of literature and puzzles are highly recommended. Weights are checked every week. When the patient is approaching the convalescent period, the nurse should inspire confidence and reassurance. Upon discharge patients are instructed in regard to personal hygiene and conservative treatments as well as exercises and positions.

By means of follow-up work in the clinic close contact is maintained with every patient after discharge. The only nurse who can treat arthritic patients is one who has much patience.

Extracts from the American Journal of Nursing

June 1932 Arthritis By Franklin Bach, M.D.
June 1932 Nursing care By Dorothy and Dora, R. N.
Dec. 1928 Nursing care and treatment By Helen V. Oakes, R. N.

In the study of medical diseases the student was asked to present material for information on arthritis to the class. He collected the above and discussion in class followed the reading of the paper.