

It is sometimes extremely difficult, and one has to try to think very hard of the advantages to the Nurses in order to keep a sense of proportion.

It has advantages and one tries to keep them well in view.

It produces a happy and contented staff.

One does not see those terribly tired and utterly weary Nurses coming off duty. I know you will all appreciate what I mean in saying this. Whose heart has not ached in sympathy with very young Nurses, new to Hospital, who come off duty looking unutterably weary? How well we know the feeling, having experienced it!

With the shorter hours their feet do not suffer in the same way.

The Matron has no anxieties as to whether they are getting their days off. These are automatic and come round with complete regularity; as also their daily off duty.

She also knows they have plenty of time to study and do their lectures and need show no leniency in this.

The disadvantages are chiefly the difficulty that arises in cases of sickness. It may happen, with the usual perversity of things that the Nurses who are sick, are all on the same tour of duty, or, as we describe it, on the same set. This is often extremely difficult to cope with and one is at one's wits' end to find a relief. Similarly when one is arranging 'moves' it is sometimes almost impossible to arrange the right move and give the Nurse the type of work she most needs on the same set of Nurses.

It is rather like doing a jig-saw puzzle, and necessitates hours of concentrated thought to see how it can be done.

Leave is also a difficulty and from the Matron's point of view the scheme does present great problems.

It is also a little more costly, although in reality not much greater than normal in a properly staffed Hospital.

In conclusion, I should like to plead for a trial of an eight-hour day in every Hospital in India. It has almost everything in its favour and would prove a great boon to both patients and Nurses.

—With acknowledgments to the 'Madras Mail'.

THE NURSING OF HEART FAILURE

Abstract of a lecture given by B. MATTHEWS, Matron, Royal Chest Hospital, at the Hospitals, Nursing, Midwifery and Public Health Exhibition and Conference.

Heart failure means the inability of the heart to discharge its contents adequately, and it may come on gradually or suddenly. When the onset is sudden, death is due to syncope, and may occur immediately or may be preceded by the following symptoms: pallor, dyspnoea, yawning and sighing, cyanosis, an anxious expression on the face, palpitation, cold and moist skin, weak, irregular pulse and, in some cases, a slow pulse. On the other hand heart failure may develop gradually, taking several weeks or months. This happens in the types of heart disease which sometimes complicate the infectious fevers, or in heart diseases arising from failure of the cardiac muscles to compensate. Such patients generally need medical supervision. They should avoid strenuous exercises, have some occupation if possible, and map out a regular, healthy life. On these lines they may go along comfortably for years.

Sudden Heart Failure.—Treatment for sudden heart failure consists in stimulating the failing heart and resting the body. The foot of the bed is

raised, hot fomentations are applied over the region of the heart and salines per rectum are given. Hot bottles and blankets are used to supply heat to the body, but care must be taken that the bed coverings provide warmth without weight. If the patient can swallow he is given small, frequent, hot drinks and brandy. Hypodermic injections of camphor in oil, pituitrin, coramine or other stimulants will be ordered.

Heart failure in diphtheria is sometimes preceded by abdominal pain and vomiting in addition to the symptoms mentioned. There is little we can do for such a patient beyond reassuring him, rest in the recumbent position, with the foot of the bed raised. If vomiting is persistent rectal glucose and salines are given. In heart failure as a complication of pneumonia alcohol is the great standby, usually in the form of brandy. Cardiac stimulants, as ordered by the physician, should be in readiness and injected according to his instructions.

The Commonest Type.—The type of heart failure we most frequently come into contact with is heart failure with congestion. We are all familiar with the symptoms, the chief of which is breathlessness, varying much in degree. It is often increased when the patient lies down, a condition known as orthopnoea. The congestion of the lungs causes cough, accompanied by frothy, sticky, and sometimes blood-stained sputum. The liver becomes enlarged and tender, and there may be slight jaundice. This latter is due to the fact that the liver being engorged with blood, its activity is impaired. The digestion is faulty as the circulation in the stomach and intestines is defective. The skin becomes cyanosed; there is oedema. Dropsy may affect the lower limbs, the abdomen and the thorax all at the same time. In advanced venous congestion there is a feeling of tenseness across the forehead, restlessness, vomiting and rapidity of pulse.

The Importance of Rest.—In treating all cases of heart failure rest is of primary importance. We, as nurses, must do all in our power to gain rest for the body, rest for the mind, and rest for the heart. The heart condition calls for unremitting care, and the patient will require skilful handling. He must be guarded against effort of all kinds. He should not lift himself, nor change his position, sometimes not even feed himself. He must be lifted on and off the bed-pan, so his nurse will need help. He should be discouraged from talking beyond indicating his immediate needs. We must move his position when uneasy, and so make him as comfortable as circumstances permit. These precautions against effort may be relaxed in cases of a more favourable type. The room or ward should be kept as quiet as possible, warm, not stuffy, for fresh air is generally much appreciated. A plentiful supply of atmospheric oxygen is necessary and does much to relieve the shortness of breath. As the illness is usually prolonged the patient's back and pressure points must be attended to frequently.

The position in bed is determined by the symptoms. Breathlessness increases with recumbency, so the patient must be propped up into a sitting position, with a bed rest and plenty of pillows. When this position is adopted it is important to support the patient properly. There must be no hollows between the pillows, and the head should be well supported; the arms should rest comfortably on pillows at the sides of the body, while a bolster supports the knees. A blanket must be placed next to the patient, and hot bottles in the bed. A cardiac bedstead facilitates nursing cases of heart failure with congestion. The wire mattress of the bedstead is in three pieces, hinged and so controlled that they may be inclined at any angle. The patient can be put in a sitting position by raising the back rests; raising the thigh rest prevents slipping, and lowering the leg rest converts the bed into a chair—the best position when the oedema is spreading up the trunk. Some relief for

breathlessness is gained by giving oxygen through a nasal catheter passed well back. The gas should first be led as a continuous stream of bubbles through warm water.

The bowels should be kept loose by means of salines to prevent straining. The hours of sleep should be reported as a daily routine, for those who fail to obtain a certain number of hours' sleep (at least six hours in each of the 24) rapidly lose ground through fatigue and weakness. A warm drink given when the patient has been made comfortable for the night is a simple measure but sometimes helpful. If he does not show signs of sleep try to find the cause. It may be due to an irritating cough or pain. Inform the doctor, who will probably prescribe an appropriate sedative. Alcohol is sometimes useful in overcoming restlessness.

Diet. The question of diet must be considered. A scale will probably be drawn up and must be strictly adhered to. The meals, which should be small, of high nutritive value and given at frequent intervals, should be well spaced and made as attractive and as varied as possible—for example, white fish (steamed), eggs (boiled or poached, not fried), toast, very little potato. Highly seasoned and indigestible foods must be avoided. Meals are better taken dry, fluids being given between meals and in small quantities. If there is much oedema fluids are restricted and generally a salt free or salt restricted diet is ordered. The amount of fluids must be measured. In very grave cases of congestion the fluid intake must rarely exceed 20 ounces. Frequent attention to the mouth and plentiful mouthwashes help to overcome thirst.

Treatment of Oedema. In the treatment for oedema various measures are used. In cardiac failure pitting confined to the feet and lower parts of the legs, usually disappears within a few days of beginning the bed treatment. This may result simply from the redistribution of the excess fluid, or may be due to rapid improvement. Cases of early dropsy sometimes respond to saline diuretics, restricted fluids and treatment for promoting the action of the skin. The amount of urine passed daily should be measured, charted and tested. The amount eliminated by the kidneys is a good indication of the power of the heart muscle. Salyrgan half to two c.c. is sometimes injected intramuscularly. This drug, which contains mercury, acts directly on the kidneys. Diuretics increase the flow of urine, and once this is started it frequently continues until all the dropsy has gone. When the dropsy of the legs has spread up the trunk the patient should be kept in a sitting position in order that the fluid may collect in the dependent legs.

For the removal of fluid from the lower limbs Southey's tubes may be used, or multiple punctures made in the legs. In the case of the tubes, the skin is prepared surgically and the tubes introduced under the skin. The trocars are then withdrawn, and long pieces of narrow tubing fitted to the cannulae. The fluid drains into a basin which contains a measured quantity of antiseptic solution. The amount of fluid drawn away must be measured and charted. Southey's tubes are kept in for a variable length of time. On removal the punctures are sealed with cotton wool and collodion. In multiple punctures the skin is prepared in the same way as for Southey's tubes, and numerous small punctures are made with a sharp knife. The fluid drains into aseptic dressings, which must be changed when they become saturated. An abundance of sterile gamgee tissue and cotton wool will be required, as the fluid escapes much more freely by this method than by the use of Southey's tubes. The greatest possible care must be taken of the skin.

For the removal of fluid from the abdomen or thorax an aspirator or trocar and cannula is used. When removing fluid from the abdomen a broad binder or many-tailed bandage is applied. A hole is made in the middle for the trocar or needle of the aspirator, and as the fluid is evacuated pressure is

kept up by pulling on the ends of the bandage from behind. The fluid is measured and charted.

Use of Digitalis.—Digitalis is a valuable drug in cases of heart failure, though it does not usually have the same dramatic effect as in some cases of heart disease—for example, in auricular fibrillation. It is given in the form of tincture, the dose, from five to 15 minims, varying with the weight of the patient; or an initial dose of as much as two drachms may be given. It is also administered in the form of digitalin—tab. digitalis folia. The action of the drug strengthens the heart muscle and the heart's action is slowed. It also acts as a tonic to the arteries and increases the flow of urine, both of which are of great value in heart failure. While treatment by digitalis is in progress, the condition of the patient must be carefully watched. As soon as any signs of poisoning occurs, such as a slow pulse (below 60), nausea and vomiting, the drug should be stopped and the doctor informed. He will decide if the vomiting is due to congestion or to the drug. If the vomiting is accompanied by a slow pulse rate it is generally safe to say it is due to the drug. If the pulse rate is not too slow the drug is continued for a day or two, in spite of the nausea and vomiting. The congestion of the stomach may disappear under the treatment. The patient will need encouragement in taking his medicine, but we can assure him the unpleasant symptoms will soon pass and that it is worth trying.

Venesection is a most potent remedy. The beneficial effect is usually only temporary, but, in some cases of heart failure in which the right side of the heart is dilated, the removal of the blood tides the patient over a period of cardiac embarrassment. He will almost always speak of relief both from breathlessness and from the sense of tension in the head. Sleep, too, becomes easier to obtain. In an adult of medium weight about 10 to 20 ounces of blood can be withdrawn, according to the severity of the congestion. For the relief of pain over the liver, or enlarged heart, an ice bag may be applied, suspended from a bed cradle, to avoid the weight of the bag. The application of leeches will sometimes relieve the pain when other remedies have failed. We should not be too despondent about this type of heart failure. Many respond quite well to the treatment which, in cases of a less severe type, will, of course, be less drastic from the beginning. In all cases, however, rest must be continued in order to re-establish the heart's reserve force. Often six to eight weeks in bed is necessary. The patient may do more for himself as he recovers his strength, and during his prolonged rest some mental occupation should be arranged. Gentle massage, especially to the legs, and a return to a fuller dietary give the patient an interest and help his convalescence.

—From the 'Nursing Times'.

'ANTI-GAS DEFENCE'

(Notes from some Lectures by COLONEL HEPPLÉ at Karachi)

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Gas is divided into :

- (1) Choking gases (such as chlorine and phosgene).
- (2) Tear gases.
- (3) Nose gases.
- (4) Blistering gas. (Mustard gas—which is made from sulphur, chlorine and alcohol).