

The *Thomas' splint* is very popular, and rightly so, in the treatment of fractures and other lower-limb conditions. The inner part of the padded ring should rest against the bone of the tuber ischii, and must never press upon the skin of the crutch, if the ring is too big, wedge-shaped pillows should be placed between the great trochanter and the outer part of the ring, to keep the inner part of the ring outward, beneath the tuber ischii. In other words, the patient must always be actually sitting on the ring. The thin skin which bears upon the ring must be well soaped and powdered, and should be moved at least every two hours, so as to bring a fresh portion of skin into contact with the ring. This saves much discomfort.

A wood *back splint, with foot-piece*, is not an effective means of keeping a leg in position, or a foot at right-angles with the leg. The lower limb, by its weight, always tends to roll outward, and the foot always gets into a position of equinus; a back-splint with foot-piece is useful enough, in my opinion, to *rest* the leg or foot, but never *fixes* them. It is, therefore, quite unsuitable for the treatment of a fracture. Whenever this splint is used, special care must be taken to get the heel right down on the footplate, and to keep it there; and, in spite of the best possible bandaging, the limb will certainly be found to have rolled outward, and to need readjustment every two days.

Weight-extension is often wrongly applied to the hip or knee. When extending a knee, the cord must be in the same straight line with the tibia; in extending a hip, the cord must be in the same straight line with the femur; if it forms an angle with the tibia, or femur, as the case may be, it sets up inter-osseous pressure; that is to say, the bones of the knee, or hip, instead of being drawn apart, are actually pressed together, with the result that pain is increased, instead of decreased. This point is of particular importance when the joint itself is inflamed, e.g., in tuberculosis.

A *calliper splint* is often ordered to be used as a weight-relieving calliper; that is to say, it is intended that the weight of the body should be transferred from the tuber ischii to the splint, and that the side-steels of the splint should then carry the greater part of the weight to the ground, so that little of it should pass through the limb itself. Many so-called weight-relieving splints are quite ineffective, and are merely an encumbrance to their wearers. Certain conditions are essential to the correct functioning of a weight-relieving calliper: (1) the tuber ischii must actually sit upon the ring, and not be through it, or half-way through it; and (2) the splint must be slightly longer than the limb, so that the heel of the patient's foot does not quite touch the heel of his boot.

Crutches must always be carefully fitted; the public always think, and not unnaturally, that the padded head is intended for them to lean upon; whereas, in fact, the whole weight of the body should be borne by the cross-handles, *i.e.*, by means of the arms. The head of the crutch is merely intended to keep it in proper position. If the crutch be too high, or the patient lean unduly upon the head, crutch-paralysis, from pressure upon the musculo-spiral nerve, will be probable. Even the cheapest temporary crutches supplied to casualty patients should always have cross-handles, and it should be the duty of a senior nurse to see that crutches really fit.

Patients who have *unhealed wounds on the lower limbs*, and are out-patients, should be advised to keep their legs up as far as possible, and not to stand about on crutches, with their legs hanging down. Such a practice tends to make them cedematous, with stiff joints. Body-fluids naturally tend to gravitate to the most dependent parts; normal muscular movements drive the blood along the veins, in which the blood can only circulate in one direction, towards the heart, and when these movements are absent (as with a person who is on crutches), the fluid simply

accumulates; crutches, therefore, should only be used for the minimum necessary amount of going to and fro, and a patient should never stand longer than can be helped with the lower limb simply dangling limply.

If *permanent stiffening of a joint* is probable, or inevitable, the joint should be splinted in the best possible position, in relation to ultimate function. The knee must be completely straight, the elbow at a right angle, midway between full pronation and full supination, the wrist must be extended, and so on.

In all cases of *injury of the hand*, remember most carefully to preserve the flexion of the end-joints of the fingers. If these be stiff, it is impossible to clench the fist fully, and so much of the effectiveness of the grip is lost. It is far easier to exercise the knuckle-joints or the proximal interphalangeal joints than the end-joints of the fingers; this is a mistake that is very commonly made, but it is of very serious consequence to working people, and I make no apologies for laying particular emphasis upon this point.

As a general principle, active *movements* are greatly to be preferred to passive movements. Pain is usually an indication that damage is imminent, and a patient can be trusted to cease active movements when severe pain occurs. Only when patients are timid, and, through their timidity, are allowing avoidable disability to occur, should passive be preferred to active movements. Moreover, passive movements are only useful in maintaining movements of joint-surfaces upon one another; in the case of the fingers, for example, passive movements merely move the tendons and their sheaths together, they do not move the tendons within the sheaths, thereby preventing adhesions of the one to the other; active movements are essential for this purpose. Moreover, active movements preserve muscularity, maintain the circulation of the blood and lymph within the respective vessels and maintain the proper chemical changes and metabolism of the body generally. Therefore, always maintain active movements of every part of the body, as far as its condition allows.

THE TUTORIAL GROUP.

TREATMENT IN DISEASES OF THE NERVOUS SYSTEM.

By Miss D. K. Graham, S.R.N., F.B.C.N.

The following paper was presented by Miss D. K. Graham, Chairman, to a meeting of the Tutorial Group held at the British College of Nurses.

DIET.

Tubes Dorsalis:—The type of diet suited to a patient with this disease depends entirely on the extent of his disability. As a rule, a simple, well-balanced wholesome diet such as has been advised for the normal person is suitable. In the more advanced stages the patient should be given frequent feeding, about five meals daily, and the meals must be composed of easily digested foods. The constipation which frequently accompanies this disease can, in a measure, be prevented by an abundance of vegetables and fruits. Coffee, tea and alcohol should be taken sparingly. In restricting the food of these patients, care should be taken to see that they get enough nourishment and that all the essential elements are included.

Chronic Progressive Bulbar Palsy.—In this disease the patients' nutrition is preserved at the highest possible level. Milk in any form, eggs, raw or soft-boiled, cereals with cream, and other highly nutritious foods in a liquid or semi-solid state should be given. Meat, when permitted, should be thoroughly ground and preferably given in the form of a purée. Carbohydrates should be largely in the form of gruels, and these are swallowed more

[previous page](#)

[next page](#)