The Functions of an Amputation Clinic*

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SUMMARY

In an effort towards a more positive approach to the treatment and rehabilitation of the amputee, an Amputation Clinic was commenced at Groote Schuur Hospital in 1968. During this period 301 new amputees were seen and assisted in rehabilitation. The importance of psychological trauma and readjustment is emphasized and the necessity of getting these patients to feel themselves to be productive, and therefore useful, members of the community is stressed.

In order for such a programme to be successful it is essential that co-ordination exist between the various services involved in the rehabilitation of the amputee. It is suggested that such a co-ordinated programme be instituted at all hospitals where appreciable numbers of amputations are carried out.

S. Afr. Med. J., **45**, 953 (1971).

The aim of the Amputation Clinic is to co-ordinate the services of the different departments responsible for the over-all care of the amputee and to assure maximum efficiency in pre-operative, operative and postoperative treatment—the end-result to be total rehabilitation wherever possible.

The psychological trauma associated with amputations is probably greater than the operative trauma and varies according to cause, age, sex and intelligence of the patient. Generally speaking, traumatic amputations cause more psychological shock than amputations on patients who have suffered a pre-operative period of severe pain or sepsis. For the latter group the actual amputation may initially come as a relief, but even these patients must eventually adjust themselves to the loss of a limb.

The treatment of the psychological trauma and the rehabilitation of the amputee is often neglected, the patient having had an amputation being lost to follow-up. Sooner or later they are granted a disability grant and sink into an existence of chronic invalidism, without guidance as to future possibilities and activities.

With these facts in mind, it is the aim of the clinic to assist in adjusting the patient pre-operatively, to take an interest in the types of amputation and such innovations as immediate prosthesis fitting or early ambulation, and then to attempt rehabilitation by co-ordination of services and careful follow-up. To fulfil these aims it was decided that the clinic should be comprised of members representing:

(a) The General Surgical Department.
(b) The Orthopaedic Department.
(c) The Physiotherapy Department.
(d) The Occupational Therapy Department.
(e) The Medical Social Workers.
(f) The Limb Fitters.

Every amputation performed at Groote Schuur Hospital is notified to the Medical Superintendent's office by the theatre sisters. This office then sends weekly copies of these notifications to each department represented in the clinic. This allows for a complete follow-up of all amputees, but it is inadequate in that some cases are only brought to the notice of the clinic a week after the actual amputation. To avoid this, an awareness of the functions of the clinic must be created among the resident medical staff so that prospective amputees are notified to the departments concerned, who can then implement therapy at an early stage.

The physiotherapist is most intimately associated with the amputee and it is important that she, at an early stage, preferably pre-operatively, gain the patient's confidence and, with the occupational therapist, becomes the amputee's 'friend in need'. This pre-operative contact is very important and is arranged whenever possible. The rehabilitation programme is explained with the assurance that a return to normal activities or, at the very least, independence, is to be aimed for.

We believe in early ambulation and try to measure the patient pre-operatively so that a temporary pylon is available for trial on the second or third postoperative day. These temporary pylons are selected from a stockpile of discarded pylons and are adjusted by the occupational therapy department workshop to fit as comfortably as possible, and are used by the amputee until a permanent pylon is available from the workshops.

The patient is referred to the Amputation Clinic while still an inpatient so that co-ordination of services is facilitated and loss to follow-up minimized.

Whether or not the patients had been fully occupied in hospital, they nearly all tended to sit at home and do nothing. Little did they realize that this could be a critical period in their rehabilitation. Then it is up to the therapist to ensure that her previous efforts to maintain a reasonable standard of general fitness in the patient, are not wasted. This standard can be maintained only by the repetition of the patient doing almost everything for himself. The patients must know how and why they bandage their stumps, also how and why they must remain active at home.

Persistence on the part of the physiotherapist and a review of the patient in the clinic at regular intervals, has paid positive dividends. Several elderly patients who might have been relegated to wheelchairs because of their response in the wards, have become ambulant and therefore independent. This is of tremendous benefit to the patient and a relief to others in the home where they stay. The physiotherapist reports the patient's progress to the clinic

*Date received: 19 April 1971.

and a decision is then made as to when a prosthesis should be ordered, or if a case is not progressing, it may be decided to continue with a pylon, or sometimes to revert to a wheelchair.

Many of these patients are faced with the problem of finding employment different to that which they previously had. Their capabilities are assessed by the occupational therapist, who then undertakes the training of the patient, or arranges further training, according to aptitude shown. Capable patients are referred to private firms willing to accept partially disabled employees, or arrangements are made with the Industrial Training Centre, or the Sheltered Employment authorities. Those patients who are unable to work, or who do not require employment, benefit from lessons in home activities as it gives them confidence, keeps them occupied and promotes a feeling of productivity.

With many, financial embarrassment is a prime factor. The younger group includes fathers with homes to support and mothers with families to care for. These cases are referred to the medical social worker, who investigates the home and working conditions and then arranges the necessary assistance, with food distribution or financial aid. In these cases, where it is obvious that employment is impractical, arrangements for disability or unemployment grants are made and the case is transferred to the district social worker for follow-up.

The Cripple Care member of the clinic works closely with the social worker and assists in much of the community adjustment, following the lines commenced in the hospital. With their detailed records over many years, they have been of inestimable value in contacting patients and tracing country cases. In this way a number of patients were traced who had been totally re-employed and who were still receiving disability grants. On the other hand, a number of cases have been traced who could potentially have been rehabilitated, but who had been lost to follow-up and were living as paupers.

To date the clinic has dealt with 301 amputees. Of these 58% (174) have been from the Coloured and Bantu populations, and 42% (127) from the White population. Of interest is the fact that in the former group 56% (97) were below 60 years of age, whereas in the White group only 31% (39) were below 60 years of age.

A breakdown of the amputations dealt with is shown in Table I.

The reasons for the amputations were as follows: atherosclerosis 164; diabetes 90; trauma 22; Buerger's disease 10; malignancy 8; sepsis 4; congenital 2; and leprosy 1.

The progress towards ambulation was as follows: prosthesis 66; permanent pylon 92; temporary pylon 55; crutches 10; wheelchair 54; tilting table 4; elephant stumps 4 and bed patients 16. Many of those patients shown as on permanent or temporary pylons will, in time, advance to a prosthesis, but this is dependent on the patient 'earning' one. It is often difficult for a patient to accept that prosthesis is a more difficult walking apparatus than a pylon, and their persistent demands for a prosthesis needs firm handling; otherwise the patient attends a private limb fitter, receives a prosthesis costing R200 - 300, and then finds that he or she cannot use it.

TABLE I. TYPE OF AMPUTATION DEALT WITH AT THE CLINIC

Site	No.
Right above knee	91
Left above knee	80
Bilateral above knee	22
Right below knee	44
Left below knee	35
Bilateral below knee	10
Right above elbow	1
Left above elbow	2
Bilateral above elbow	1
Right below elbow	1
Left below elbow	2
Right through knee	1
Left through knee	3
Left hindquarter	2
Right hip disarticulation	1
Left hip disarticulation	3
Right Symes amputation	1
Total	301

Many of the older patients are already retired or receiving a pension and do not require rehabilitation in terms of employment. However, there still remains a large group, especially among the Coloured people, who are younger and require assistance. A total of 167 amputees fell into this group and Table II shows the assistance arranged for them.

TABLE II. ASSISTANCE ARRANGED FOR AMPUTEES

Rehabilitation	No.
Returned to previous employment	61
New employment	25
Grants arranged	19
Pensions	62
Total	167

CONCLUSION

The Amputation Clinic at Groote Schuur Hospital has through its co-ordination of services, served a very useful purpose in the over-all treatment of amputees. There is certainly a very great need for this type of service in any hospital where a substantial number of amputations are done.

Our future plans include the formation of an Amputee Club where amputees can get together once a week for social recreation. This will be run in conjunction with the physiotherapy and occupational therapy departments and should act as a stimulus to those amputees who are finding adjustment to their new way of life difficult or boring. A function of these club members will be to visit prospective amputees to encourage them and to show them what can be done despite the loss of a limb or limbs.