REHABILITATION OF THE AMPUTEE

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PROPER management of the amputee patient demands more than surgery alone. The surgeon's responsibility includes supervision of a complete and integrated rehabilitation programme embracing psychological preparation, adequate surgery and after-care, teaching athe patient how to care for his stump, training prior to fitting with the prosthesis and finally the use of the prosthesis. Only by the application of this whole programme is it possible to provide the amputee with the complete physical and psychological equipment that he requires.

None of you who are disabled can forget the emotional experience at the realisation that a part of your body has been permanently lost. I have seen the bewilderment and desolation among the newly amputated who ask me "Will I walk again," "Will I work again?", and who tell me that their lives are finished.

Just as it is my responsibility to allay these anxieties and to assure the patients of what can be done for them, so is it your responsibility if you will accept it, those of you who have mastered your diasbility, to help us in this task. Demonstrations by amputees who are already successfully adjusted will help the new amputee to realise that he can become a happy and productive unit in the society to which he must return.

Let me tell you something about amputations. In the leg we have three main levels for amputation.

1. Symes amputation:

This is performed just above the ankle joint, leaving an end bearing stump covered with the skin of the heel which is naturally weight bearing skin. This amputation is generally out of favour, except in Canada, because a revision is so often necessary at a higher level due to nutritional changes in the stump. It is, however, of value in South Africa, among the Bantu, who cannot afford expensive prostheses, nor are they able to care for them.

2. Below Knee—Site of election.

This is five or six inches below the knee joint with the fibula slightly shorter than the tibia so as to give a conical stump. This stump is long enough to control the prosthesis adequately and yet short enough to avoid nutritional changes. It is a side bearing stump, the weight being taken under the flare of the tibia, the head of the fibula and the crest of the tibia. Pneumatic sockets have recently been introduced, but do not suit everyone.

3. Above Knee—site of election.

This is 10″ to 12″ below the prominence felt at the side of the hip. It gives excellent stump control but the weight is transmitted to the ischium,—the bone one normally sits on. The skin in this region is satisfactory as it is used to bearing weight. A recent advance is the suction socket, which requires no suspension harness, and is very satisfactory.

4. Other leg amputations are known, but are not much practised to-day. If the leg is lost at or just below the hip joint, a special prosthesis with what is known as a tilting table is worn.

After operation it is several months before a stump is ready for fitting with a prosthesis, as it has to be shrunk to skin and bone. This is encouraged by bandaging. Special exercises are needed for stump control. Eventually the stump is measured and a prosthesis made and the great day comes when it is worn for the first time.

Every leg amputee should have four weeks' training, after which he should be proficient in the use of the limb. There should be no rush to walk, because all one does then is to develop bad habits which are difficult to eradicate.

1st week: Putting on and taking off prosthesis.
Standing.
Balancing.
Sitting.
Swaying and transferring weight.

The prosthesis should not be retained by the amputee during this week. Most amputees can, and want to do more but should be restrained as it invariably leads to sore stumps and bad habits.

2nd week: Walking on level ground,
Turning,
Walking backwards for B.K. amputees.

3rd week: Walking upstairs and downstairs.
Walking on uneven ground.

4th week: Advanced instruction,
Sports activities,
Dancing.

This programme goes for a single leg amputee, but more time and practice are necessary for the double leg amputee. At the end of the training period every single leg amputee almost without exception should walk without a stick, and in the B.K. amputees it should be impossible to spot that there is any disability. If this is not the case, it is due to incorrect fitting or inadequate training.

It is during this period of training that all personal and vocational adjustments should be made and here the help of completely rehabilitated amputees is invaluable.

In the arm the problem is far more complicated by the fact that only 50% of the effective function of the hand is dependant on movement and grasp, the other 50% being vested in the sense of touch so that with the best possible prosthesis we can offer less than complete restoration of function.

In arm amputations too there are three main levels:
1. Above the wrist.
2. Below the elbow.
3. Above the elbow.

In the arm there are several possibilities. The basic demands are either dress or utility. A light dress arm is not of great use, but looks better and is best for people whose work brings them into contact with the public. The labourer or artisan on the other hand requires the maximum function possible, for which he frequently sacrifices appearance. In Britain the artisan uses a prosthesis into which his tools are made to lock. In America the split hook is favoured and while more functional is probably less aesthetic. With

this, objects can be grasped quite strongly and the hook can be used for lifting heavy weights.

There are two other special procedures used in arm amputations.

1. **The Krukenberg procedure:**
Here the two bones of the forearm are separated by a plastic procedure so as to provide some prehensile power. It is certainly very ugly and is probably best confined to its country of origin—Germany—although it would be quite useful in Central Africa.

2. **The Kineplastic Procedure:**
This gives the amputee excellent control. The live muscle remaining in the stump is canalised and lined with skin, the superficial defect being covered with a skin-graft. A peg connected to the mechanism is inserted through the canal, and by contraction of muscles the amputee can motivate his prosthesis. This process can be applied to both above and below elbow stumps but is naturally far more effective in the lower amputation. It can be worn either with a functional dress hand or a hook for utility, and is naturally of great value in the double arm amputee

I have outlined rapidly and briefly how much we can do to help the amputee, but the spirit must come from the amputee himself. The community too must play its part but cannot be expected to do so unless it is educated to appreciate the potentialities of the amputee and for this task there can be no better teachers than the members of the St. Giles Club.

I wish to convince all of you and through you, the public, that amputations are not and must not be allowed to become insurmountable obstacles to a normal and satisfying life.

VACANCIES

VANDERBIJL PARK MEDICAL BENEFIT FUND.
Vacancy: FULL-TIME PHYSIOTHERAPIST.

Applications are invited from qualified Physiotherapists for the above position.

The commencing salary will be determined in accordance with qualifications and experience but will not be less than £750 per annum.

In addition to the above a variable cost of living allowance is paid, at present amounting to £27 2s. 6d. per month for married persons and £14 14s. 8d., per month for single persons. A holiday leave bonus equivalent to one month's basic salary is also paid in terms of the Fund's Leave Regulations.

The successful applicant will be required to furnish a satisfactory certificate of health, to contribute to the Iscor Pension Fund and to become a member of the Vanderbijl Park Medical Benefit Fund and the Iscor Recreation and Social Club.

Applications giving full details of qualifications, experience, age, marital state and earliest date duties can be assumed should reach the underigned, P.O. Box 1, Vanderbijlpark, not later than Monday, 30th July, 1956.

Application forms will be forwarded to bona fide applicants on written application to the undersigned.

H. A. LAMBRECHTS,
Secretary.

VANDERBIJL PARK MEDICAL BENEFIT FUND.
18th June, 1956.

VANDERBIJL PARK MEDIESE BYSTANDSFONDS.
Vakature: VOLTYDSE FISIOTHERAPEUT.

Aansoeke word ingewag van gekwalifiseerde Fisiotherapeute vir bovermedle betrekking.

Die aanvangssalaris sal ooreenkomstig opleiding en ondervinding bepaal word, maar sal nie minder as £750 per jaar beloop nie.

Benewens die basiese salaris sal 'n wisselende lewensduurte toelaag wat tans £27 2s. 6d. per maand vir getroude perone en £14 14s. 8d., per maand vir ongetroude persone beloop, betaal word. 'n Vakansie bonus gelykstaande aan een maand se basiese salaris, word ook betaal, ooreenkomstig die Fonds se Verlof Regulasies.

Dit sal van die suksesvolle applikant verwag word om 'n bevredigende gesondheidsertifikaat te voorsien, en om tot die Yskor Pensionfonds by te dra. Lidmaatskap van die Vanderbijl Park Mediese Bystandsfonds en die Yskor Ontspannings—en Geselligheidsklub sal verpligtend wees.

Aansoeke waarin volle besonderhede aangaande opleiding, ondervinding, ourderdom en huwelikstaat vermeld word, en wat die vroegste datum waarop dienste aanvaar kan word aandui, moet die ondergetekende, Posbus 1, Vanderbijlpark, voor of op Maandag, 30 Julie 1956, bereik.

Op skriftelike aansoek sal aansoekvorms aan bona fide applikante gestuur word.

H. A. LAMBRECHTS,
Sekretaris.

VANDERBIJL PARK MEDIESE BYSTANDSFONDS.
18 Junie 1956.