PERSONALITY AND PROSTHESIS

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Summary:

The use and the individual value of an artificial arm is dependent not only on the specific criteria of the chosen prothesis system and the working and living conditions of the amputee but also on his personal determination and ability. Hense follow-up examinations of 68 disabled who were fitted out with bio-prothese were carried out. In this attention was paid as to the value of the artificial arm and several indicators demonstrating the attitude of the amputee to it. As a result both positive and negative factors emerged. Subjective factors like readiness to cooperate and an active attitude can change in the wake of an amputation. Therefore it is possible to take a positive influence through psychic guidance on the person in need of an artificial arm.

Introduction:

We are striving at the integration of the technical aid "Prosthesis" by the amputee.
The triad Man-Prosthesis-Environment must be balanced, if the process of integration is to progress undisturbed. In general we are supplying the amputee with the type of prosthesis in correspondence with his occupation. If necessary vocational re-training is carried through, thus changing part of the environment.
Supplying the procthesis is an integral part of the complex system of rehabilitation. Often the condition of the amputation stump is in the centre of interest in this type of prosthesis supply. Finally the amputee is dismissed with a prosthesis which fits and operates well. A good part of the patients gets accustomed to the prosthesis and makes use of it. A smaller part of the patients does not get used to the prosthesis and puts it aside.
Through the need for self-help the unilateral amputee learns fairly quickly to adapt himself to the new situation to do everything with one hand only, even with the support of the stamp. During the adaption process he regaine his independence.
This process of learning may be finished after three months, while after a year patterns of movement and automisms of movement are fixed. In this way the amputee has become "single-handed".

However, the fitting of the prosthesis starts very often after this period. Therefore another process of learning or adapting becomes necessary for the amputee, but not all of them decide to do so.
The expectation and the requirements of the prosthesis by the amputee are dependent on several factors. Important is the length of the stump, the fact whether unilateral of bilateral amputation had to be carried through, and last but not least the entire personality of the amputee has to be considered when the type of prosthesis is chosen. In other words, the personality of the disabled himself is decisive through his conscious work with the prosthesis.

He himself determines the utility and the individual value of his prosthesis. Lacking personal engagement renders useless good prosthesis equipment. With this in mind examinations were started on amputees fitted with bioprotheses.

Methodics:

68 arm amputees were examined who were fitted with bioprostheses. The individual value of the prostheses was examined in relation to certain characteristics of the personality of the amputee.
The period of utilisation of the bioprosthesis was between 5 months and 9 years. The indication was established on uniform criteria (1).
The examination was carried out by interviews, demonstration of skill, definite exercises (e.g. control of the prosthesis, coordination, concentration, endurance with the prosthesis). The examinatins were carried through on the following characteristics of personality:

active / pasive
adaštonče / not adaptible = A/a
cooperative / not cooperative

put up with / not put up with the situation =B/b

the situation
nervous / not nervous
concentrated / not concentrated
independent / not independent =C/c

Usage of the prosthesis:
daily = Full integration of the prosthesis by the amputee
(amputees who feel disabled in the absence of the prosthesis)
for hours = amputees who in spite on non-integration feel advantages of prosthesis
occasional = irregular usage of prosthesis

Results:

Table 1: Usage of the bioprosthesis in relation to characteristics of the personality

Combination of peronality characteristics	ABC (1)	aBC (2)	abC (3)	AbC (4)	ABc (5)	Abc (6)	aBc (7)	abc (8)	total
usage									
daily	27	2	-	3	7	-	1	1	41
for hours	8	4	-	-	3	-	1	-	16
occasional	-	2	1	1	-	1	2	4	11
	35	8	1	4	10	1	4		68

Combination (1) shows the best results.
Combination (8) shows the worst results. It is the negative variant of combination (1). We found that the characteristics of Group A= activity, adaptibility, cooperation - are the most important combination for integrating the prosthesis. The combinations B and C have secondary consequences.

Conclusions

These results are a beginning. Parallel with these examinations similar examinations were carried through (2.,3.,4.).
These initial results point to a multiple set of problems in the rehabilitation of the disabled, such as overcoming the amputation shock and putting up with the new sitation.
Certainly we have to see such characteristics as cooperation, activity etc., in the context of the amputation. In this connection the characteristics of the personality are not always a constant part of the personality. Therefore there are genuine possibilities for correcting the fitting of the prosthesis through individual psychic guidance not only within the rehabilitation centre, but also in the general environment of the amputee, at home and at work.

References:

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