Report on Design and Fitting A/K Prosthesis For Geriatric Amputee

BY PETER A. OCKENFELS, C.P.
Columbus Orthopaedic Appliance Company
Columbus, Ohio

EDITOR'S NOTE: The following is taken from a report to the referring physician on the prescription and fitting of an A/K prosthesis for a geriatric amputee. Entire responsibility for the prescription was given to the limb shop by the physician. Because of the patient's age, the prosthetist was doubtful that a successful fitting could be made. However, the final prosthesis was completely satisfactory to the patient, the prosthetist, and the physician.

This is a report on a patient, an 84-year-old woman, regarding preparation and use of an A/K prosthesis. With geriatric patients of this advanced age, we must proceed with caution.

Our first contact with the patient was on February 24, 1962, when, at her home, we examined and evaluated her for the use of a prosthesis. We instructed the patient to wrap her stump with an elastic bandage to obtain atrophy and to get the stump used to constant pressure similar to that of the fairly compact-fitting prosthetic socket.

On March 10, 1962, we again visited the patient. Results of her using the elastic bandage were already evident. After examining the patient we recommended that a prosthesis with the following components would be most advantageous for her:

A right above-knee prosthesis with conventional quadrilateral shaped socket, rigid pelvic joint suspension with a light pelvic belt, an Otto Bock safety knee model 3L5 in Abache light wood, and a SACH foot (solid Ankle Cushion Heel) with a soft heel for easy compression on heel strike.

On March 29 the patient was measured for the prosthesis. On April 11 the quadrilateral socket with pelvic joint and pelvic belt was fitted to the patient.

On April 20 the prosthesis was built up in the rough and fitted to the patient. She then practiced standing up and sitting down, and doing a few steps with the prosthesis.

On May 11 the patient received training in walking between parallel bars, with the artificial limb. She did rather well, and on May 15 she received walking training with a walker, and inspected our whole facility. When asked if she were tired, she replied, "Oh, no! It feels so good to walk on two legs again."

On May 21 she received additional walking training and was shown how to put on and take off the prosthesis. This was the most difficult part for her at first. It should be added that for all visits to our facility, we picked up the patient and returned her to her home.

On June 7, 1962, we delivered the finished prosthesis, with additional walking training, to the patient at our facility. We also called on her twice at her home in order to teach her husband how to aid the patient in putting the prosthesis on and taking it off. After this there seemed to be no further difficulties in this respect. We asked the patient to call us every day for

a week and give us a report on her walking activities. The only mild complaint we received was that the prosthesis was so heavy. This is a usual complaint with older patients, and the prosthesis was kept as light as possible in relation to strength.

The fit of the prosthesis is as follows:

The ischial tuberosity is well placed on the ischial seat shelf of the prosthetic socket. The trochanter plumb line is well anterior to the knee center for additional stability; and the prosthesis is kept approximately one inch short, since the patient had difficulties during walking training in elevating her hip as much as necessary to clear the ground with the prosthetic foot during swing phase. In a sitting position, the prosthetic knee extends approximately one inch compared to the sound knee. This is a normal condition with a rather long stump fitted with a pelvic type suspension prosthesis.

In closing, may we add that at first we were not very enthusiastic about fitting a prosthesis for a lady of this advanced age. However, we now are glad that we did, and are very happy with the results. The patient was rechecked at home in early October. She wears the limb daily in the house, but, due to lack of dependable assistance on steps, curbs, and getting in and out of cars, relies on a wheel chair if she leaves her home.

NELSON GADGETS NO. 8

THE PENDULUM TRAY

For a little change from "all business," this time I will give you a different type of gadget. The pendulum tray was designed to carry liquids, drinks of any kind, without spilling. One can carry it without extra care or swing it around; it will not spill, even though the glasses or cups may be filled to the top, as long as it is set down carefully and not jarred by bumping it into something.

The tray shown in the picture is ten inches in diameter; it is made of aluminum, covered with celastic. The three chains are twelve inches long.



They are attached at the top to a metal ring and at the bottom to the rim of the tray at three points, equally spaced.

This is a practical gadget as well as a conversation piece and it would be well worth your time to make one.

PAGE 50 MARCH, 1963