Use of Photography in Cast Preparation

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Cast modification may well be considered the single most important phase of prosthetic service because it is the key to the provision of a comfortable, functional socket. This is, obviously, the basis for all prosthetic treatment.

The prosthetist draws on a wealth of knowledge in preparing the plaster model, not the least of which is his memory of each individual amputation. It was felt that a method of recording the visual appearance of the stump at the time of casting might be quite helpful to the prosthetist.

The Polaroid "Big Shot" camera (Fig. 1), type 108 film, and batteryless magicubes were selected because of low initial investment, con-

venient operation, and the immediate results provided by the Polaroid process. The time added to the normal casting and measurement procedure is thus less than four minutes.

The basic procedure is quite simple. When possible, we position the patient against a dark background, normally a piece of brown paper taped to the cast room wall, and place an 18 in. ruler parallel to and directly beside the amputated side. On the stump, we mark the reference point for measurement of length (i.e., on the BK the patella tendon). The photo is taken from the front (Fig. 2).

There are obvious advantages when the photographs are used, the visual reminder of shape and condition being the most important (Fig. 3). There is, however, a secondary advantage. During the testing of this procedure, we noted an immediate

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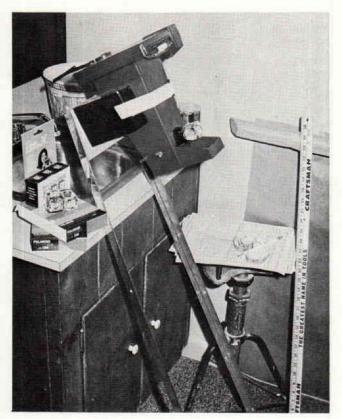


Figure 1
The 'Big Shot' camera.



Figure 2

The frame shown attached to the camera has been designed to eliminate the problem of focusing at an uncomfortable level.



Figure 3

The photograph is attached to the patient's file as a 'visual' record of the stump. Its primary use is during the cast modification procedure.

improvement in patient response to treatment.

Our feeling at this time is that the patient responds to the quickly available photograph as a demonstration of our interest in offering the best prosthetic care possible. This, of course, is a highly subjective analysis that can only be proved by the passage of time.

This addition to the normal cast and measurement procedure should be viewed as just that, an addition. It is not a replacement, or substitute for thorough prosthetic examination of the stump, and not a "short-cut" method of recording prosthetic information. The procedure has been developed as an accurate, simple, and inexpensive means of providing a picture of the amputee's stump while preparing the plaster model. The prosthetist can "see" his patient, thus adding to the written information and his memory of shape, structure and texture.