Unusual Copolymer Prosthesis (Thoracoplasty Restoration)

by

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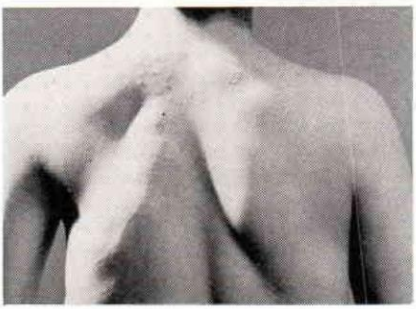

Fig. 1. Shows depression left by surgery. Side was also deficient and there existed a most serious atrophy of the left breast.

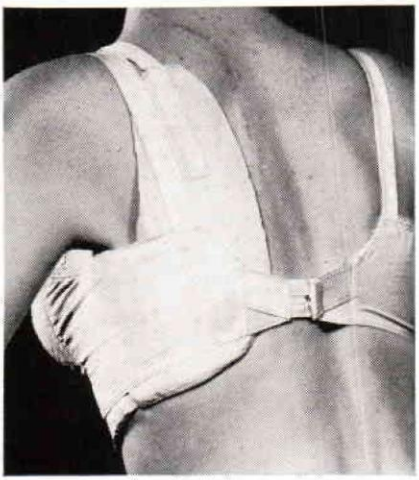

Fig. 2. This is the same picture with the prosthesis held in place by the bra.→

You see above the result of a typical thoracoplasty with post operative tissue recession on the left side front and back, and misaligned torso caused in part by lack of support and in part no doubt due to the patient attempting to shield the areas. You will also see the special type prosthesis which has been made.

The young lady who has so graciously permitted us to bring these pictures to you in the hope that it may result in comfort and a more normal appearance for others, is twenty six years old. The thoracoplasty was performed eight years ago. She and her family had been searching for some years in the hope of finding a satisfactory cosmetic restoration. It was relatively easy to get a breast restoration, but there seemed to be no one who could or would attempt to make the complete prosthesis indicated.

Our method of procedure is first to determine and mark plainly on the skin the outer periphery of the agreed-on restoration. A comfortable brassiere is then put on and a line marked extending laterally around at supported nipple height, if necessary cutting through the bra at various places, being sure the line is quite straight. The bra is then removed and the atrophied breast held in place in line with the normal side, by criss-crossing Scotch tape over a square of gauze which has been placed over the breast. We then spiral plaster bandage over normal breast and atrophied supported one. Before this plaster sets the bra is replaced molding it to the bandage with a moistened sponge. Application of plaster bandage is resumed until the entire torso front and back, armpits to waist is securely covered. This requires about five or six rolls of 4" bandage depending on size of patient. After plaster is set, a line is made longitudinally and the bandage cut through from bottom to bra strap on the side nearest the normal breast.

Fig. 3. Front view illustrates the carefully sculptured restoration of the atrophied left breast.

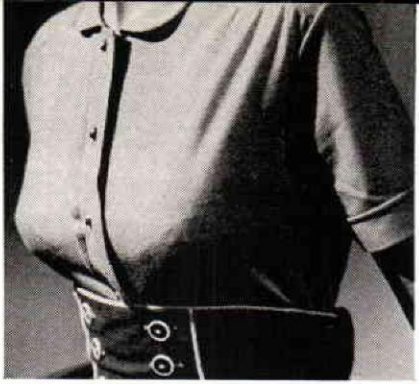

Fig. 4. The full effect of the prosthesis as seen under clothing.

The process of having the cast made is very tiring to the patient and the whole procedure requires the full cooperation of patient and prosthetist.

The laboratory part of the making of this item is the furnishing of the wax pattern for the try in and the molding of the copolymer foam. The manner in which the wax pattern is arrived at, is by sculpturing on to the plaster torso, a restoration of the depressed areas in water clay. Subsequently, a plaster template or negative is poured over the sculptured clay and then this latter removed, leaving the cavity. A hole is drilled into it to act as a sprue. The plaster mass of both positive and negative portions of the mold is soaked. A special hot wax formulation is then poured into the cavity which will need no separation other than the moist surface. When cooled the mold may be separated and any shrinkage compensated for. The wax pattern is then ready for try in.

The wax pattern is fitted to the patient, adding to or taking away as necessary to attain as nearly as possible the normal contour as well as the exact calipered thickness in the various areas to be restored. One of the great difficulties of course was the fact that the breast on the side of the operation had atrophied and needed to be very carefully built out as well as fitting perfectly the body area.

Following the adjustments to the wax pattern, a new positive and negative mold is made, this time in gypsum stone rather than plaster. Additional strength is given from the use of a seisel reinforcing. The mold is again sprued and cleaned and its surface treated with a separator. When the two halves are joined together and sealed, the foam is mixed according to the formula and injected into the cavity.

Steam curing is the best and a special pressure cooker was used for this prosthesis.

You will observe the brassiere strap incorporated in the copolymer holds the prosthesis in place, with a regular brassiere then worn as usual. The restoration extends somewhat below the brassiere which also aids in holding it in place. It is advisable to use small lingerie clips to hold the straps in line. This had not yet been done when these pictures were taken. In some circumstances it may be advisable to attach a ¾" web at the lower part extending around the body to keep the prosthesis more firmly in place.

This prosthesis is light in weight and cool yet durable and washable. It not only gives much needed support and comfort but also adds immeasurably to the poise and well-being of the patient by the natural appearance attained.

DVR Brace Clinic Praised

Sponsors and Personnel of The D.V.R. Brace Clinic

Personnel and friends of the Brace Clinic in New York City pause in their deliberations to have a picture taken for the Journal. Left to right: M. Fiedel, Konrad Hoehler, Frank Carey, Adolph Margoe, Harry Katz, Edward Gernannt, Thelma Murray, Richard Gottheimer, Dr. Samuel Sverdlik, Arthur Pomeroy, William Spiro, Miss Butler.

A unique brace clinic now in its first year at St. Vincent's Hospital, New York City, is the result of cooperation between the New York Division of Vocational Rehabilitation and MOALMA. Dr. Samuel S. Sverdlik is Medical Director of the Clinic.

The Clinic devotes special attention to patients for whom the proper bracing makes possible their effective rehabilitation and employment. Other problem cases may also be referred to the Clinic for the "team" consultation of physician, therapist and orthotist.

Milton Tenenbaum, president of MOALMA, paid tribute to the New York rehabilitation officials for their leadership and careful planning, which led to this new Brace Clinic. Among them are: Nelson Voorhees, Supervisor of the Division of Vocational Rehabilitation in New York City. Mr. Harry Katz, DVR official in charge of amputees and hospital outpatients and Miss Thelma Murray, Counsellor and liaison representative between the Clinic and the DVR. Adolph Margoe, Chairman and Vice President of MOALMA, has served as Chairman of the Brace Clinic Committee representing the orthopedic appliance facilities in New York City.

New York City Conference

The annual scientific "get-together" sponsored by MOALMA is one of the events of the year for many of our members throughout the United States. This year MOALMA has named Charles Goldstine, of the Institute for Crippled and Disabled as Program Chairman, and Mrs. Mary Dorsch is to be in charge of hotel arrangements.

The dates are May 3 and 4, 1957. The place: The Grand Ballroom of the Hotel Biltmore.