The Present Status of Breast Augmentation

Many prosthetic devices have been devised through the years for breast augmentation. Up until the past few years most of these were objectionable in that they were too hard and caused local tissue foreign body reaction.

Recently new implants have been devised which combine local tissue nonreactivity and a pleasant shape and texture. These implants variously are (1) a Silastic® bag filled with silicone gel, (2) an inflatable Silastic bag, and (3) a Silastic bag divided into three compartments, each filled with silicone gel and covered with a fine layer of polyurethane foam.

All of these more recent implants have been reported as successful and only the future will determine their final acceptability.

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Silastic® Joint Prosthesis in the Hand

A great deal of experience is now available in the use of silicone rubber joint prosthesis in the hand. Such devices are best used in a weakened hand with severe, far-advanced joint destruction and dislocation such as is seen almost exclusively in rheumatoid arthritis. One must not expect dramatic return to normal hand function with the use of these implants but must gauge results by the degrees of functional and cosmetic improvement. These prosthetic joints act primarily as internal splints to maintain alignment and promote motion following arthroplasty, rather than as replacement of joint function. While they are most beneficial in metacarpal phalangeal joint deformities, they are also occasionally useful in the proximal interphalangeal joints and wrist. These implants do not preclude the surgical care of other related problems such as coverage, tendon misalignment or rupture, and skin and muscle contractures.

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Correction of Drooling in Cerebral Palsy

The distressing problem of drooling in the cerebral palsied child has tied the patient to bibs and towels. The problem stems from the discoordinate control of the tongue, lips and cheeks in moving saliva to the pharynx. The second or pharyngeal phase of swallowing is usually normal. These children are frequently very thirsty, probably due to the loss of saliva which would normally be swallowed.

A newly developed surgical procedure creates an extension of the parotid duct with a segment of cheek mucosa, which is then re-routed into the tonsillar fossa. This fairly simple procedure is usually followed by a dramatic decrease in salivary loss and a more normal fluid intake. If the tonsils are diseased, tonsillectomy may be necessary beforehand. If there is some residual sialozemia after the new procedure, a sub-maxillary gland resection will usually provide complete control.

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Modification of Wound Healing Patterns

Wound healing mechanisms vary to some degree according to the patient's age, race, family

history, and the presence of other abnormal scars. In the history of past recurrences, whether the process is a keloid, or a hyperthrophic scar, the cosmetic and etiologic implications related to its site should be taken into account. These scars represent formidable surgical problems.

In our clinic a study was made of the results of treatment of 149 raised scars by one or another of three methods: (1) simple excision alone, (2) excision followed by radiation—900 to 1800 rads in three to six doses at the excision site soon after operation, and (3) excision preceded and followed by local steroid injection, combined with radiation.

Of 104 raised scars in caucasians, the success rate was 28.5 percent when excision alone was used; however, when excision and radiation were used the success rate was appreciably higher (58 percent). In a total of 39 black patients, only one successful treatment response was observed with excision alone, whereas 50 percent success was noted with excision and radiation combined. In a total of six orientals there were no successes using excision alone, whereas excision and radiation was successful in 50 percent. In the series using the combined treatment (steroids, excision, and radiation) the success rate was 60 percent plus.

These statistics support the use of combined radiation and surgical excision with local steroid therapy in the treatment of raised scars.

There is no evidence to suggest that wide excision of raised scars helps to prevent recurrence.

FRANKLIN L. ASHLEY, M.D.

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Immediate Reconstruction After Radical Cancer Operations on the Head and Neck

Radical operation on the head and neck for extirpation of cancer causes severe deformity and also interferes with the physiological functions of the upper airway and digestive systems.

The basic principle for such operation is the en bloc resection of all involved tissue, provided there are no distant metastatic lesions. Spread beyond the cervical lymph nodes usually occurs late in most forms of this disease.

Immediate reconstruction involves the skillful use of pedicle flaps, skin grafts and prosthesis in order to restore form and function. Furthermore, it enables the surgeon to extend his margins to greater anatomical limits and thus reduce the risk of local recurrence.

The advantages of a pedicle flap over a skin graft for reconstruction are: (1) the transfer of blood supply and subcutaneous tissue from a distance, making it less liable to fibrosis and contracture and to the effects of previous irradiation; (2) the ability to fill in large defects; (3) the covering of an exposed carotid artery to prevent rupture; (4) the transferred skin, permitting further radiation to underlying tumor; and (5) resurfacing areas with radionecrotic ulceration.

Modern surgical procedures have reduced the number of stages required for reconstructions.

Bakamjian of Roswell Park has introduced the most versatile of pedicle flaps, the medial-based delto-pectoral with its blood supply from the anterior branches of the internal mammary vessels. This flap, with its proximal carrier portion tubed, can reach to the zygomatic arch or the eustachian tube to line the cheek or oropharynx. The hypopharynx and cervical esophagus can also be reconstructed in a two stage operation with this flap.

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Nasal Ethmoidal Fractures

The standard treatment for fractures of the nasal-ethmoidal complex has been by transnasal wires held in place by metal plates. This has resulted in secondary telecanthus in a significant number of cases. Other complications of the