In 33 growing rabbits an artificial cartilage defect overlying the tracheal mucosa was created by resecting the anterior parts of 4 to 8 cartilage rings. The defect was covered with a free periosteal graft from the tibia of the same animal.

The area of transplantation was studied with X-ray once a week and the animals were sacrificed after one to 8 months for macroscopical and histological examination.

After 3 weeks, bone could be observed. A cylindrical plate of solid membranous bone was constantly achieved.

The authors suggest that free periosteal grafts from the tibia could possibly be used on patients with permanent endotracheal intubation, to achieve an outer supportive ring to keep the lumen open after extubation.

Jan O. Strömbeck

Neoplasms

Benisch, B., Wood, W., Kroeger, G., Breitenbach, E., and Cohen, J.: Focal muscular hyperplasia of the trachea. *Arch. Otolaryng., 99:* 226, 1974.

This is apparently the first case report of what the authors term "focal muscular hyperplasia of the trachea." It is occurred in a 57-year-old black seaman seen for mild dysphagia, progressive shortness of breath, and a rise in the pitch of his voice. A submucosal lesion just below the larynx was found on bronchoscopy and biopsied. The pathology report was that of benign smooth muscle. The lesion was conservatively excised through an anterior tracheal approach. The patient apparently did satisfactorily.

Richard A. Mladick

Zirkle, T. J., and Thompson, R. J.: Deltopectoral flaps. *Arch. Surg.,* 108: 770, 1974.

The authors present 5 cases demonstrating the applicability and versatility of the deltopectoral flap in head and neck cancer reconstructive surgery following radical excision.

John C. Kelleher

UPPER EXTREMITY

Nickell, W. B.: Special considerations in resurfacing hand injuries with the groin flap. *South. M. J., 67:* 567, 1974.

The value of the groin flap in resurfacing major avulsive injuries of the upper extremity is discussed. Case reports illustrate the necessity for careful attention to details of design, elevation, delay, and transection of the flap.

Francis A. Morris, Jr.

Harvey, F. J., and Harvey, P. M.: A critical review of the results of primary finger and thumb amputations. *The Hand, 6:* 157, 1974.

The authors have studied the results of primary finger and thumb amputation following industrial injuries in a personal series of 83 patients over 10 years.

Ian A. McGregor

Reid, W. H.: Care of the burned hand. *The Hand, 6:* 163, 1974.

The author discusses the problems of managing burns of the hands and in particular the need to use a dressing method which is easily and relatively painless when changed by a relatively unskilled staff. The dressing allows movements of all joints without hindrance and permits the hand to be elevated initially. The use of disposable polythene dressing gloves to fulfill the desired criteria is advocated.

Ian A. McGregor

Conolly, W. B.: Spontaneous healing and wound contraction of soft tissue wounds of the hand. *The Hand, 6:* 26, 1974.

The author has explored the results of allowing fingertip wounds to heal spontaneously following traumatic loss of pulp, surgical excision of pulp, or surgical amputation after infections of the area rather than trauma. He has also applied the McCash open palm principle to volar injuries and to dorsal injuries.

Ian A. McGregor

Hayes, C. W.: One-stage nail fold reconstruction. *The Hand, 6:* 74, 1974.

The author describes a method he has used in one case to reconstruct the nail fold in 3 fingers where it had been lost after burns. In each finger he uses a distally based transposition flap of skin, taken from the ulnar side of the finger adjoining the nail, with a full-thickness graft applied to the secondary defect.

Ian A. McGregor

LOWER EXTREMITY

Stallworth, J. M., Hennigar, R. G., Jonsson, H. T., and Rodriguez, O.: The chronically swollen painful extremity: a detailed study for possible etiological factors. *J.A.M.A., 228:* 1656, 1974.

In 1940, Allen and Hines of the Mayo Clinic described a chronically swollen, painful lower limb to which they gave the name "lipedema" (painful fat syndrome). They distinguished this from the swollen limb secondary to venous or

lymphatic stasis. The authors, noting the absence of any literature on the subject since the original report, studied 14 patients with a diagnosis of lipedema, in an effort to delineate the nature and etiology of this syndrome.

Lipedema, which may start in adolescence, gives the lower limb a stove-pipe appearance. The skin appears normal, but is markedly painful to pressure, especially below the knee on the medial side. Women are more frequently affected than men.

Venograms, lymphangiograms, and arterial flow studies were within normal limits. Biopsies of subcutaneous fat were unremarkable. Chemical studies, however, revealed abnormal amounts of atypical lipids (altered fatty acid patterns) in both the subcutaneous fat and the plasma.

The authors conclude that lipedema is not influenced by a low salt diet, by diuretics, or by elevation of the limb. They recommend long-term compression to relieve some of the edema and pain, and a permanent type of support from the knee to the toes.

Errikos Constant

Sumner, D. S., Criblez, T. L., and Doolittle, W. H.: Host factors in human frostbite. *Mil. Med., 141:* 454, 1974.

The authors present a study of 292 soldiers personally treated during a 3-year period at Fort Wainwright, Alaska (1967 to 1970). These patients were compared with 3,766 soldiers who performed duties similar to theirs and who used identical protective gear. The cases and controls were subdivided according to rank, race, education, climate of origin, age, and history of prior cold injury. Eighty-one percent of the frostbite occurred in individuals who were on duty. Approximately one-half of the cases occurred in the lower ranks. Negroes were 2.8 times as susceptible as caucasians. Caucasians with *Type O* blood appeared to be more susceptible than those with *Types A* or *B*. Persons born in warmer climates and those with previous cold injuries had an increased incidence of frostbite. Cigarette smoking increased the incidence of frostbite. The data support studies from the Korean War which showed that increasing rank, education, and experience in the field were associated with a lower incidence of frostbite.

Joseph R. Zbylski

Diamond, L. S., and Gould, V. E.: Macrodactyly of the foot: surgical syndactyly after wedge resection. *South. M. J., 67:* 645, 1974.

The authors present a review of macrodactyly and its surgical treatment. A patient with macrodactyly involving the great toe and the second toe had been followed for 10 years. Lack of success in controlling the growth of the toes by resection and epiphysiodesis led the authors to perform a wedge resection of the first and second toes to form a syndactyly, fusing the great toe to the second toe. In one year there has been only modest enlargement of the toes without further extension of the lesion, and it is hoped that this procedure may control the distortion of shape and overgrowth of the toes.

Francis A. Morris, Jr.

GENITOURINARY SYSTEM

Bystrom, J., Alfthan, O., Johansson, B., and Korlof, B.: Induratio penis plastica (Peyronie's disease). Results after excision and dermo-fat grafting. *Scandinav. J. Plast. & Reconstr. Surg., 7:* 137, 1973.

The authors used a new operative procedure for the surgical treatment of plastic induration of the penis in 13 patients. The age distribution was 30 to 69 years. From a curved incision the indurated area was carefully dissected free and excised. The resulting cavity was filled with a dermofat graft taken from the thigh and sutured in place. After surgery, a catheter was introduced, and a compression bandage was applied. A few days before the operation, the patient was placed on estrogen medication that was continued during the stay in the hospital.

The results were classed as excellent in 4 patients and good in 6, all of them with an observation period of more than one year. One patient noted some improvement, but in two patients no improvement was seen. The authors' experience is that surgical excision and a dermofat graft should be considered in cases with well-defined induration and a distinct curvature of the penis. Cavernosography could help in the preoperative assessment of the disease process.

Jan O. Strömbeck

Marchac, D.: Extensive superficial vulvectomy with primary skin grafting for premalignant lesions. *Brit. J. Plast. Surg., 26:* 40, 1973.

The author reports 8 patients operated upon for premalignant conditions of the vulva and followed for about one year. Four had Bowen's disease, two had erythroplasia, one had kraurosis, and one had Paget's disease.

Details of technique are stressed. The excision is bilateral and symmetrical. The skin of the vulva is removed, sectioning through the fat of the underlying *labium majoris* but superficial to