from the anastomosed vessels, 200 mg of hydrocortisone are given.

Complications encountered include hypotension due to extensive oozing of blood and failure of adequate replacement. The anesthetist must be cautioned against the use of vasoconstrictors, since an untoward response is often seen. Hypothermia is another common complication, usually resulting from the large incision and failure to keep the patient adequately warm.

Mr. Peter Morris, a surgeon from Melbourne, discussed immunologic aspects of transplantation. A cadaver kidney seldom survives more than five years. The cause of the death of the kidney is usually a cellular immuno-response, although a humoral response is not to be discounted. Nine patients subjected to second renal transplants were studied, all of whom had demonstrated cytotoxic antibodies. In three of these there was hyperacute rejection; four of the kidneys failed within one to six months, and an additional one failed in eight months. Mr. Morris noted that all patients who had had a cardiac transplantation were showing evidence of rejection. Patients develop antibodies against leukocytes through transfusions, pregnancies, skin grafting and the like. Leukocytes can be typed; if the projected recipient and donor have their leukocytes typed and evidence of rejection by the recipient appears, the chances of organ rejection are better than 85 per cent. Immunosuppression can be accomplished to some extent with azothioprine or corticosteroids. Antilymphocyte suppression has been tried in 80 patients, but the results are equivocal. Mr. Morris predicts that by 1975 all donors and recipients will first be subjected to tissue typing; there will be long-term storage of organs to be transplanted, there will be better immunosuppressive techniques, there will be international shipping of organs for transplantation, and the transplantation of animal organs into the human being will be established.

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Drugs

SUBCUTANEOUS HEPARIN Prolonged treatment with subcutaneous calcium heparinate is superior to treatment with dicumarol derivatives. With dicumarol derivatives, the mortality rate due to pulmonary embolus was 2.2 per cent in 1,000 patients, whereas in 500 patients treated with calcium heparinate it was only 0.6 per cent. Calcium heparinate is injected into the iliac fossa by means of a graduated tuberculin syringe with an intradermal needle. The starting dosage is 0.1 ml/10 kg. A biologic test for clotting (Howell's test) is performed after six hours. If clotting is prolonged by 1.5 to 2 times, the starting dosage is maintained. Otherwise the dosage is raised or lowered accordingly. The injections are administered every 12 hours. The biological tests (Howell's and Quick's) are performed twice weekly for the first two weeks and weekly thereafter. Subcutaneous nodules at the injection site can be avoided if the injections are administered perpendicularly and not tangentially. Hemorrhage may occur spontaneously or following trauma. Hematomas of the abdominal wall were common, but internal bleeding occurred very rarely. Epistaxis following insertion of a nasogastric tube may necessitate a temporary decrease in the subcutaneous heparin injections. Hematuria occurred once following bladder catheterization and on another occasion revealed the presence of a bladder stone. Accidental overdosage of heparin may be treated quickly with protamine sulfate. (*Amstutz, P., Szekely, A. M., and Pocidalo, J. J.: Les Traitements Anticoagulants Prolonges Par L'Heparine Sous-Cutance, Anesth. Analg. 30: 203 (March) 1968.*)