RADIOACTIVE SYNOVIORTHESIS IN HAEMOPHILIAC HAEMARTHROSIS。 <u>F.Fernandez-Palazzi</u> and <u>N.B. Bosch.</u> Orthopaedic Unit, Municipal Blood Bank, Distrito Federal, Caracas, Venezuela.

Because haemarthrosis is the main musculoskeletal symptom in haemophilia, with bleeding originating from the synovial membrane, its prevention by either synovectomy, or better synoviorthesis, must be the principal aim of orthopaedic treatment. Since 1976 we have treated 10 patients with recurrent haemarthrosis of joints (5 knees, 3 elbows and 2 ankles) with radioactive synoviorthesis with gold (AU 198), obtaining in all of them a diminution of frequency in bleeding episodes and factor VIII requirements, and in 7 a total absence of new haemarthrosis. Previous to the synoviorthesis, a joint screening with Tecnesium was performed, in order to compare the inflamatory status of the synovia with that five months after synoviorthesis. The technique used as well as dosage of AU 198 and factor VIII coverage, is presented.

A LASER SCALPEL FOR OPERATIONS ON HEMOPHILIACS. H. Horoszowski, U. Seligsohn, M. Heim and I. Farin. Hemophilia Center, Chaim Sheba Medical Center, Tel-Hashomer, Israel.

The CO<sub>2</sub> laser scalpel has an excellent hemostatic effect producing a minimal paraincisional necrotic zone. Four severe hemophilia A patients were operated with the laser scalpel. Three underwent knee synovectomy 2 of whom without placing a tourniquet. The fourth patient underwent an operation for hip contracture. Factor VIII levels at the beginning of the operations were gradually reduced from the first operation to the fourth as follows: 100%, 80%, 14.5% and 1.4% respectively. No significant bleeding was observed during any operation. The 3 patients who underwent synovectomy were ambulated as early as 3 days after operation. They were discharged after 20 - 26 days, which is considerably shorter than the mean stay of 39 days in the hospital in 8 patients who had been synovectomized previously by the conventional method. An attempt to stop replacement therapy in the fourth patient on the 6th postoperative day resulted in bleeding. Thus, the advantages of the laser scalpel are: Excellent local hemostasis, tourniquet unecessary, low levels of factor VIII sufficient at operation, early ambulation and discharge. It is not as yet clear whether the amount of postoperative replacement therapy can be reduced. The disadvantages are: Longer operation time (by about a third); smoke produced at theatre; the price of the instrument.

SURGERY IN HEMOPHILIC PATIENTS WITH INHIBITORS. P.E. Kelly and J.A. Penner, University of Michigan Medical Center, Ann Arbor, Michigan, U.S.A.

Major surgical procedures were performed in two hemophilic patients who had developed inhibitors. A total hip replacement was accomplished in one patient with an inhibitor to Factor IX, while a massive retroperitoneal pseudo-tumor was removed from another hemophilic with a Factor VIII inhibitor. Both patients received a single dose of cyclophosphamide prior to surgery. Blood replacement during the procedures reduced inhibitor activity to levels which permitted correction of the patients' deficiencies with infusions of the appropriate factor. A subsequent rise in antibodies experienced by both patients was sufficient to neutralize the standard doses of factor at six days, and necessitated the use of an activated prothrombin concentrate, Auto IX (Hyland). Peak inhibitor activity was observed at 27 days in the individual with hemophilia B, and fell to pretreatment levels at 7 months. Inhibitor patient, and has continued to fall

slowly 2 months after surgery.