



VASCULAR ANASTOMOSIS

I. OBJECTIVES

By the end of this laboratory session participants should be able to . . .

Create a leak-tight connection between the endothelium of a blood vessel and graft.

II. ASSUMPTIONS

Residents participating in this module should be skilled in general surgical techniques including suturing and knot-tying.

III. SUGGESTED READING

Rutherford, R. Vascular Surgery, 5th Ed. Saunders, Phila., PA (2000)

IV. ANATOMICAL CONSIDERATION

(See section III)

V. DESCRIPTION OF LABORATORY MODULE

Residents will perform an end-to-side anastomosis between Gortex graft and *ex vivo* pig aorta (see below).

VI. DESCRIPTION OF TECHNIQUE/PROCEDURE

- (1) Residents will be given handout and exercise explained by instructor.
- (2) Residents will perform end-to-side anastomosis of Gortex graft to *ex vivo* pig aorta using double-armed 6-0 Prolene.
- (3) Specimens will be placed in plastic weighing dishes and anastomoses will be leak-tested with IV bag of normal saline. Amount of leakage will be quantitated by weight.

VII. EQUIPMENT NEEDED

- (1) Gortex graft material
- (2) Segments of porcine aorta
- (3) Castroviejo needle drivers, forceps, Potts scissors, hemostats, arterial clamps
- (4) Double-armed 6-0 and 7-0 Prolene