

8. Office Based Vascular Procedures are Safe and Effective

Mark Rummel, MD, Krishna Jain, MD, John Munn, MD, Sarat Vaddineni, MD, Tammy Klemens, RN and Shikha Jain, MD

From: Advanced Vascular Surgery, Kalamazoo, MI and Michigan State University, East Lansing, MI

OBJECTIVES: To assess the safety and efficacy of percutaneous arterial, venous and dialysis access imaging procedures and interventions in an office setting

METHODS: Between May 23 2007 and April 22 2008, 932 procedures were carried out in 578 patients in the office. Type of procedure, complications within one month and success of the procedure were tabulated. Preoperatively, all patients received oral antibiotics, analgesic and tranquilizer as well as three doses of oral antibiotic post operatively. Arteriogram patients (Group1) had preoperative PT, PTT, BUN and creatinine measured. They were hydrated for one hour before procedure and post procedure. Patients with renal insufficiency also received a Bicarbonate drip. Group 2 patients had EVLT or EVLT and microphlebectomy: group 3 had Dialysis access related procedures: group 4 had catheter related procedures: group 5 had venogram and related procedures: An attempt was made to call all patients on next working day.

RESULTS:

	Group1	Group2	Group3	Group4	Group5	total	%
Procedure number	137	131	396	261	7	932	
Complication	4	5	6	5	0	20	2.1

There was 0 % mortality. Break down of complications is as follows: In Group 1; operative interventions 3, M.I. one: Group2; partially occluding clots in Common femoral vein 2, skin burn1, cellulitis1, procedure could not be completed 1: Group3; dye allergy 2, graft occlusion 1, cellulitis1, lost wire 1 (retrieved), allergy to Keflex 1: Group4; bleeding 3, broken catheter 1 (retrieved), infected hematoma 1. In 109 patients with clotted access one procedure was abandoned because of heart block. In remaining 108 patients, 78 patients (72%) were successfully dialyzed post thrombectomy. In 11 patients (10%) the site was abandoned and in 20 patients (18.5%) repeat surgical or mechanical thrombectomy was carried out. Post procedure calls were made after 81% of procedures. All patients would come back if additional procedures were required.

CONCLUSIONS: Arteriograms, venograms, fistulograms, percutaneous interventions and catheter related procedures can be safely and effectively performed in office setting. Patient satisfaction is excellent. Many costs and inconveniences associated with hospital based procedures are avoided.