

JVIR



SCVIR 99

ORLANDO

**24th
ANNUAL
SCIENTIFIC
MEETING**

ORANGE COUNTY
CONVENTION CENTER
ORLANDO, FLORIDA
MARCH 20-25, 1999

SCIENTIFIC PROGRAM

that follow-up routine does not differ according to filter type. Eight responders indicated that routine follow-up was not performed but patients were seen when clinically indicated. Thirty-eight responders defined follow-up methods. Eighteen of these 38 use telephone contact as part of the follow-up process, and 8 of these use only telephone contact. Nineteen of these 38 include physical examination, and 5 of these use only physical examination. Twenty of these 38 include diagnostic studies (radiologic or ultrasound), and 6 of these use only diagnostic studies. Fifty-nine of the 395 responders either do not return the manufacturer registration forms after filter placement or do not know if the forms are returned.

CONCLUSIONS: Follow-up of patients by radiologists after IVCF placement is not common. Of interventional radiologists who responded that IVCF patients are followed, telephone contact is an important follow-up method, although physical examination and diagnostic studies are also used.

Poster No. 255

Minor Open Operative Procedures Can Safely Be Performed in a Standard Angiographic Suite

Lindsay S. Machan, MD, Vancouver, Canada • Peter D. Fry, MD • D. Lynn Doyle, MD • John Masterson, MD

PURPOSE: To assess the postoperative infection rate for operative procedures performed in an angiography suite.

MATERIALS AND METHODS: We reviewed combined operative and radiologic procedures involving an incision requiring surgical closure performed on 82 patients in the angiographic suites of two sites of the same hospital. Both rooms are standard angiographic suites with no special air flow or advanced sterility features; otherwise, conventional operating room sterility procedures were adhered to. The procedures included femoral artery cutdown for endovascular stent-graft insertion (n = 41) (including insertion of nine femoral-femoral prosthetic crossover grafts after aorto-uni-iliac stent-graft insertion), penile vein ligation/pelvic venous embolization (n = 33), and brachial artery cutdown for angiography or angioplasty (n = 8). Eight procedures were performed with local anesthesia, 74 under general anesthesia.

RESULTS: Mean procedure time (available for 68 patients) was 3 hours 45 minutes. Technical success was achieved in 79/82 procedures. Four patients had penile paresthesia and there were three significant groin hematomas. No postoperative infections were recorded.

CONCLUSION: Minor operative procedures, even those of considerable length, can be performed with acceptable infection rates in a standard angiography suite. The theoretical risk of infection should not obviate the use of

available high-quality imaging equipment for endovascular procedures such as stent-grafts because operative cutdown is required.

Poster No. 256

Improved Radiation Protection for the Interventional Radiologist and Cardiologist

Jerry N. King, MD, Albuquerque, NM • Charles A. Kelsey, PhD • Anna M. Champlin, MD

PURPOSE: To demonstrate the effectiveness of a new radiation protection method designed to decrease the amount of scatter radiation received by radiologists, cardiologists, and technologists performing interventional procedures under fluoroscopic guidance.

MATERIALS AND METHODS: A sterile and disposable surgical drape containing radiation protection material composed primarily of barium was evaluated for effectiveness in reducing radiation doses to radiology and cardiology personnel. Primary beam measurements were taken and compared to lead to determine the effectiveness of direct beam attenuation for this material. Measurements were also taken at three different heights above the floor during phantom and patient fluoroscopic studies. The meter was mounted on a tripod to provide a fixed distance across studies, and positioned to accommodate personnel of various heights. Patient studies were also performed using the same measurement technique.

RESULTS: Primary beam attenuation >99% was obtained for both lead and the material being evaluated. Routine clinical use of the material is limited to a practical thickness of approximately 5 mm, which resulted in primary beam attenuation >93% and up to 98%. Scatter radiation was reduced by 85% at 60 cm, 87% at 56 cm, and 63% at 43 cm in the phantom studies. Patient studies demonstrated similar results, with an overall reduction of approximately 65%.

CONCLUSIONS: Depending on the procedure and the height of the practitioner, use of this radiation protection method can reduce the radiation dose to personnel by as much as 90%. A reduction in overall radiation exposure of 60% or more can routinely be achieved in most cases when this material can be employed.

Poster No. 257

Coil Embolization of Small Patent Ductus Arteriosus: A Cooperative Effort Between Interventional Radiology and Pediatric Cardiology

Kyran Dowling, MD, Albany, NY • Harm Velvis, MD • Brian Stainken, MD • Gary Siskin, MD • Allen Herr, MD

PURPOSE: Small (<3 mm) patent ductus arteriosus (PDAs) are thought to be clinically significant because of an increased risk of endocarditis. The purpose of this