21323

Long Injection Time and Biplane Oblique Patient Positioning in Femoral Arteriography.

S.B. Poster et al., *Angiology*, 29(6), 450-453, (1978).

21320, 24420

Flow-directed Ballon Catheterization for Aortofemoral Arteriography Using the Axillary Artery Approach.

Edward Buonocore et al., *Amer. J. Roentgenol.* 131(5), 823-825, (1978).

Summary

An axillary artery approach is occasionally necessary in the evaluation of the abdominal aorta and peripheral arteries in patients with severe and complicated arteriosclerotic disease. Difficulty may be encountered in directing the catheter into the descending aorta in patients with extremely tortuous and elongated aortic arches. Use of flow directed angiographic balloon catheters has made abdominal, pelvic, and lower extremity arteriography readily obtainable using an axillary approach when other methods failed and translumbar aortography was considered hazardous. This might be particularly useful in patients with high abdominal aortic occlusions, in anticoagulated patients, in patients with abdominal aortic grafts, and in some patients with small aortas displaced to the right.

21335, 21462

Application of Radiographic Magnification Technique with an Ultra-High-Speed Rare-Earth Screen/Film System to Oral Cholecystography.

Herwig Imhof et al., *Radiology*, 129(1), 173-178, (1978).

Summary

2X magnification employing a 200- μ focal spot and an Alpha 8-XM screen/film system was applied to oral cholecystography and the results compared with those for the conventional contact technique with the Par-RP system. The basic imaging properties of the system, as well as phantom studies, indicated that the image quality obtained with magnification is comparable to or better than that for the conventional technique. In clinical studies on the detection of gallstones, the conventional technique revealed 5 true-

positive and 17 true-negative cases and 1 false-positive and 2 false-negative cases, while the magnification technique provided 7 true-positive and 18 true-positive cases but no false cases. With the magnification technique the skin dose was reduced to approximately half that for the conventional contact technique.

21437

Computed Tomography for Localization and Sizing of Experimental Acute Myocardial Infarcts.

Gray W.R. et al., *Circulation*, 58(3), 497-504, (1978).

21437

Computed Tomographic Evaluation of the Breast.

Chang, C.H.J. et al., *Am. J. Roentgenol*, 131(3), 459-464, (1978).

21437

Computed Tomography Scans on Paper.

Ackerman, A., *Radiology*, 128(3), 819-820, (1978).

21437

The Noise Power Spectrum in Computed X-ray Tomography.

S.J. Rideser et al., *Phys. Med. Biol.* 23(3), 446-454, (1978).

21437

Effect of CT Noise on Detectability of Test Objects.

Evelyn Chew et al., *Am. J. Roentgenol.* 131, 681-685, (1978).

Summary

Three types of test objects were superimposed on noisy backgrounds and observed by 58 subjects: large low-contrast disks to simulate tumors, small disks to simulate calcifications, and bars to simulate blood vessels. Three types of noise were used: random noise, CT noise (reconstructed random noise), and an actual water scan taken with an EMI CT1010 scanner. In addition, each image was smoothed by a factor of two, giving six test patterns altogether. Photographic images were presented to 25 lay observers, while 25 other lay observers and eight radiologists used a viewing console. The photographs produced a slightly lower true positive rate than the console, although the degree of confidence in the identifications was slightly greater. The anticorrelation property of CT noise gives it a "lumpy" structure, which aided the identifications of bars but im-