文 献 紹 介

文 献 委 員 会

21251, 214, 21410

Effects of Geometric and Screen-Film Unsharpness in Conventional and 350-kVp Chest Radiography.

Hans AG, et al Radiology, 137(10), 197, (1980).

Summary

Clinical comparison of 350- and conventional 120-kVp techniques indicates that small linear structures, such as small pulmonary blood vessels, are shown better at 120 kVp, due in part to two factors affecting image unsharpness: geometric and screen-film unsharpness. The combined effects of geometric (U_g) and screen-film unsharpness were evaluated for both kVp levels. The total-system modulation transfer function ($MTF_{U_g} \times MTF_{\text{screen-film}}$) demonstrates differences in unsharpness under two conditions: (a) when the same screen-film system is used with different magnifications (*i. e.*, extreme planes in the chest), and (b) when different screen-film systems are used for magnification of the midplane of the chest.

21324, 21463

Changerless Peripheral Angiography: A New Concept

Amplatz K, et al, Radiology, 137(10), 213, (1980)

Summary

The authors describe a new technique using the principle of rotational scanography, in which the x-ray tube is rotated through the center of the focal spot and scans the field of interest. A single primary and secondary slot system in conjunction with an 8:1 grid is used for efficient scatter removal. If the speed of blood flow is increased by reactive hyperemia and a large amount of contrast medium is injected, the abdomen to the toes can be scanned with one injection. The advantages of this technique are that a 127-cm field can be covered with a 6° or 12° target tube and without an especially high ceiling, and the film changer is eliminated. The angiograms are markedly improved because virtually all scatter is eliminated, and exposure is reduced since only

radiograph is necessary.

21329, 24310

Arthrography of the Knee Using Remote Control Fluororadiography.

Arida EJ, et al, Amer. J. Roentgenol, 135(6), 1295-1297, (1980).

21332

内視鏡検査時に発生した胃の裂創のX線像.

七海曉男, 他: 臨床放射線, 26, 137-140, (1981).

21437, 21430

Ectomography: A New Radiographic Method for Reproducing a Selected Slice of Varying Thickness.

Edholm, P., et al, Acta Radiologica (Red), 21(4), 433-442, (1980).

Summary

The mathematical basis is described of a new radiographic method by which an arbitrarily thick layer of the patient may be reconstructed. The reconstruction is performed from at least 60 images of the volume under examination. Each of these images, which have to be in digital form, is subjected to a special filtration process of its spatial frequencies. The combination of all the images will form the resulting image of the layer—the ectomogram. The method has been analysed and tested in experiments simulated with a computer.

21463, 432

Simulation of Extended Mantle Field by Tray Shift Technique.

Nair, TKM, Brit. J. Radiol. 53(653), 1087-1089, (1981).

21437, 510

CT 検査によるリスクの推定 (1979), 第1報 スキャン回数及び検査件数

西沢かな枝, 他, 日本医放会誌, 41(1), 45-50, (1981).

21437

コンピュータトモグラフィの雑音消去法についての考察.