only the largest and next-to-largest bars are accurately represented; the other four sextants show moiré patterns. The images shown here are from a General Electric Porta Camera IIC; similar results were obtained with other low-energy collimators and with the Picker mobile camera. These distortions are interesting, but are not expected to appear in clinical images because no clinical study accumulates activity in the required repetitive pattern.

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REFERENCES


Color Modification of Syringe Shields to Enhance the Visibility of Syringe Contents and Calibrations

A number of reports (1–8) have alerted the nuclear medicine community about the need to reduce hand and finger exposure resulting from handling radionuclide-loaded syringes. This has led to the development of a variety of commercially available syringe shields. Some of these shields incorporate leaded glass windows to facilitate viewing of the syringe markings and contents; however, it is often difficult to see through the glass.

We have found that the visibility through the leaded-glass of the syringe calibrations and the contents can be markedly improved by merely coloring the inner surface of the barrel of the shield opposite the window. This can be done by simply inserting a strip of colored plastic tape, or alternatively, painting. We have found that yellow or white is the most effective.

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Scintigraphy in Acute Lymphocytic Cell Leukemia

In children, acute lymphocytic leukemia will relapse in the CNS even in the presence of hematologic remission. Leptomeningeal infiltration is the most common form of CNS involvement. Parenchymal brain lesions are rare (1).

The following case describes the scintigraphic CNS abnormalities in a child with acute lymphocytic leukemia who developed leptomeningeal as well as parenchymal brain lesions.

The patient was admitted on May 11, 1971 at the age of 3 yr for joint pain and fever. A diagnosis of acute lymphocytic leukemia was established by bone-marrow biopsy. The cerebrospinal fluid (CSF) examination was normal.

She was treated with vincristine, prednisone, and methotrexate. She promptly went into remission, but later developed CNS relapse (April 20, 1973). The CSF contained lymphocytic leukemia cells. She received 2,400 R to the cranial vault, as well as intrathecal methotrexate.

After April 20, 1973 the patient had three recurrences of CNS leukemia. The therapy consisted of an additional 3,000 R to the craniospinal axis, intrathecal methotrexate, as well as systemic methotrexate and 6-mercaptopurine.

On Oct. 7, 1977 a bone-marrow biopsy demonstrated the first hematologic relapse of leukemia. She was started on vincristine, prednisone, and L-asparaginase for reinduction; and cytoxan, adriamycin, vincristine, and prednisone for maintenance. The CSF was normal at this time.

FIG. 1. To-99m glucoheptonate brain images. (2-hr delayed). Note multifocal cerebral masses.