

SPLENIC DISPLACEMENT DUE TO GASTRIC DILATATION

Steven Landgarten and Richard P. Spencer

Yale University School of Medicine, New Haven, Connecticut

Gastric dilatation in the very young carries a serious outlook, particularly when it accompanies pneumonia or peritoneal infections (1). The dilated stomach produces symptoms of distress, and gastric rupture can occur. We have recently studied a boy with gastric dilatation and obtained scan documentation of splenic displacement.

CASE REPORT

A male, 22 months of age, was admitted with a radiographically confirmed diagnosis of left lower lobe pneumonia. This was treated initially with oxycillin and ampicillin. Bacteremia developed over a 6-day period and responded poorly to adequate doses of appropriate additional antibiotics. As a result, a search was made for an occult source of infection such as an hepatic abscess.

Liver-spleen scintiphotos were obtained with a Pho/Gamma III gamma-ray camera, ½ hr after intravenous administration of 0.48 mCi of ^{99m}Tc-sulfur colloid. At the time of the scan, the child was markedly distended and had radiographic evidence of gastric dilatation. The following morning, after radiographic reconfirmation of the dilatation, a nasogastric tube was introduced into the stomach and the stomach was decompressed. A repeat liver-spleen scintiphoto was obtained. The pre- and post-decompression scans are shown in Fig. 1.

DISCUSSION

Marked displacement of the spleen in this case, and its reversal by gastric decompression, raises at least two interesting points. First, the spleen is as-

sumed to be a posterior and lateral structure; hence splenic movement produced by dilatation of the stomach might not be guessed at initially. We have reported one case (an adult) in which the spleen changed position over a 6-day period (2). Whether this was due to gastric changes is unknown. Second, the mechanism of the distress produced by gastric dilatation has not been well defined. On the basis of this study, we might hypothesize that displacement of intraabdominal organs, and vascular traction might be involved in producing part of the distress.

SUMMARY

A boy aged 22 months, following pneumonia and a septic course, had inferior displacement of the spleen on scintiscan and gastric dilatation. Decompressing the stomach resulted in return of the spleen to a more normal position.

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For reprints contact: Richard P. Spencer, Nuclear Medicine Section, Yale University School of Medicine, 333 Cedar St., New Haven, Conn. 06510.

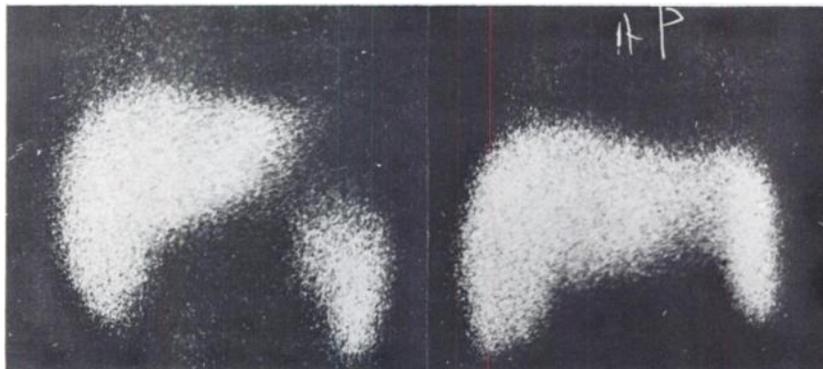


FIG. 1. Pre- and post-gastric decompression (anterior) scintiphotos of abdomen. Return of spleen to more normal position is apparent. Initial posterior scan also documented low position of spleen without major intrasplenic defects.