FIGURE 1
Single photon emission tomographs were made with a GE 900 camera attached to a star computer system, 18 hr after the intravenous injection of 9 mCi [123I]MBG or 3 hr after the injection of thallous-201 (40 Ti). The short axis images are construction of 1.2 cm sections taken through the midportion of the heart. A: Tomographs made from a MIBG scan in a normal man; both right (on the left of the image) and left ventricles and their respective cavities are seen. Radioactivity in the liver can be seen below the heart. B: Tomographs made from the MIBG scan in the patient with DAN who died suddenly. There is absent uptake in the posterior region of the left ventricle (large arrow) as well as the right ventricle (small arrow), providing evidence of non-uniform loss of adrenergic neurones and an imbalance in adrenergic innervation. C: Tomographs made from the 40 Ti scan in the patient whose images are shown in B. This image is constructed from sections at the same level as those in B and is normal. Although this image was made with the patient at rest, exercise induced no abnormality.

References

Joel K. Kahn
James C. Sisson
Aaron I. Vinik
University of Michigan
Medical Center
Ann Arbor, Michigan
The University of Texas
Health Science Center
Dallas, Texas

Intense Bilateral Breast Uptake of Gallium-67

TO THE EDITOR: In a recent article in this journal, Vazquez et al. (1) presented a case of intense bilateral breast uptake of gallium-67. The patient had a hypothalamic granuloma and a high prolactin level. This high prolactin level was felt by the authors to be the cause of the intense uptake. The authors further implied that high prolactin levels should be suspect whenever such intense bilateral symmetrical breast uptake is seen.

We have observed a gallium scan in a 78-yr-old male that showed intense uptake bilaterally in breast tissue, with increased uptake in the left hilar region and possibly very mildly increased uptake in the right hilar region (Fig. 1). He had had a previous transurethral prostatectomy and bilateral orchidectomy for carcinoma of the prostate. He was placed on diethylstilbestrol following surgery. The gallium scan was requested to assess activity of pulmonary fibrosis seen on chest x-ray. The gallium scan suggested that there was mildly active disease in the left hilar region and possibly also the right hilar region.

The chest x-ray showed bilateral gynecomastia and mild bilateral diffuse fibrotic changes.

Unfortunately a prolactin level was not available for this patient. Clinically this patient was not suspected of having a pituitary or suprasellar tumor.

Do Vazquez et al. have any similar cases to indicate that hyperprolactinemia and not estrogen is the cause of intense breast uptake of gallium?
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**References**


Iizzie Boxen
*University of Toronto*
*Princess Margaret Hospital*
*Toronto, Ontario, Canada*

**REPLY:** Dr. Boxen's case and illustrations are interesting. The common causes of symmetric breast uptake fall into three groups: hyperprolactinemia (normal physiologic, drug-induced, renal failure), mammary duct hyperplasia (estrogen therapy, estrogen-containing oral contraceptives), and gynecomastia (idiopathic, orchiectomy) (1). We felt that the breast activity in our case was most likely related to the known elevated prolactin level although certainly estrogen may have contributed to the finding as well.

**Reference**


Elizabeth Oates
*New England Medical Center Hospitals*
*Tufts, University*
*Boston, Massachusetts*

**REPLY:** O'Connor et al. have described another cause of pulmonary gallium uptake which may occur in intravenous drug abusers, a population which is at risk for AIDS and, therefore, frequently undergoes gallium scanning. Although the specificity in the AIDS patient of diffuse pulmonary uptake of gallium for *Pneumocystis carinii* pneumonia has been reported to range from 74% (1) to 90% (2) depending upon the interpretation criteria applied, this high specificity in part is due to the high prevalence of PCP in the AIDS population (3). Other causes of infection, particularly CMV, and inflammation, including drug reactions and unexplained nonspecific inflammation, also occur in the AIDS population and have been associated with diffusely increased pulmonary uptake of Gallium (2,4,5). Pulmonary talc granulomatosis may be a less common cause of respiratory symptoms in the AIDS population but it is useful to be reminded of this possibility.

**References**


Elissa L. Kramer
*NYU Medical Center*
*New York, New York*

**Gallium-67 Scans in Acquired Immunodeficiency Syndrome**

**TO THE EDITOR:** In a recent review, Kramer et al. published the results of gallium-67 (67Ga) scans of the chest in 71 adult patients suspected of having acquired immunodeficiency syndrome (AIDS), and who presented with fever and/or res-

**FIGURE 1**
Anterior view of chest 48 hr after intravenous gallium-67.