Reply

Our studies of patients with hyperandrogenism indicate that dexamethasone-suppression (DS) adrenal scintigraphy can be used to identify those patients in whom the adrenal glands are a contributing source of and rogens (1). Three patterns of imaging have been identified: early unilateral (<5 days), early bilateral (<5 days), and late bilateral (>5 days) after 6-[131]iodomethyl-19norcholesterol (NP-59) injection. Adrenal-vein catheterization in the groups with early unilateral and bilateral imaging patterns confirms and rogen hypersecretion. Using the method of Koral and Sarkar, evaluation of the in vivo uptake of NP-59 in these patient groups allows their separation (2). The NP-59 adrenal gland uptake was higher in the early-imaging groups, both bilateral and unilateral, than in the normal (late-imaging) group (p < 0.05) (3). In addition, the calculated uptake is correlated with the level of 24-hr urinary ketosteroid excretion in the bilateral and unilateral imaging groups.

It thus appears that the pattern and degree of DS-NP-59 adrenal gland uptake is a reflection of the abnormal adrenocortical function in these patients. Although preliminary, these studies indicate that the in vivo calculation of NP-59 adrenal uptake may be useful in separating these groups and in identifying those patients with hyperandrogenism in whom the adrenal glands are a contributing source(s) of androgen hypersecretion.

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Prostatic Metastases Masquerading as an Iliac Artery Aneurysm on Radionuclide Angiography

Radionuclide angiography has been used as a noninvasive technique in the diagnosis of intra-abdominal arterial aneurysms (1,2). We report a case of unusual symptomatic intra-abdominal metastases from a prostate cancer masquerading as an iliac artery aneurysm by radionuclide angiography.

Case report. A 75-yr-old white male was hospitalized for weight loss, right lower quadrant abdominal pain, and symptoms of prostatism. Physical examination revealed a questionably pulsatile mass in the right lower quadrant and a firm, enlarged prostate. Pelvic ultrasound showed a cystic mass with irregular margins in the right pelvis. When the patient developed an abrupt increase in his right lower quadrant abdominal pain, radionuclide angiography was performed to look for an iliac aneurysm. Fifteen millicuries of Tc-99m DTPA was injected intravenously. Immediate imaging of the aorta and the iliac vessels showed a large area of increased activity in the region of the right iliac artery during the arterial phase. The activity persisted in the venous phase (Fig. 1).



FIG. 1. Tc-99m DTPA radionuclide angiography showing large area of increased activity in region of right iliac artery during arterial phase. This activity persisted in venous phase.

This finding was felt to be compatible with an iliac artery aneurysm. Preoperative arteriography of the right iliac artery, however, did not demonstrate any aneurysm or tumor neovascularization. While awaiting exploratory laparotomy the patient suffered a fatal cardiac arrest. Postmortem examination showed extensive retroperitoneal nodal metastases from a poorly differentiated carcinoma of the prostate. Microscopically the tumor mass was highly vascular.

Our patient had the rare condition of prostatic metastases presenting as a symptomatic abdominal mass (3). The abrupt increase in abdominal pain in the presence of a questionable pulsatile mass, led to a workup to rule out an iliac aneurysm. An aneurysm diagnosed by radionuclide angiography is seen as a fusiform bulge of the vessel examined (2). A false-positive aneurysm was demonstrated on radionuclide angiography in our patient. Ultrasonography is probably the most effective noninvasive method for confirming the clinical diagnosis of an abdominal aneurysm (4). In retrospect, the irregular margin of our patient's cystic mass seen on pelvic ultrasound should have pointed against the diagnosis of an aneurysm. The wall of an aneurysm has a smooth fusiform shape that blends into the normal vessel, whereas an irregular wall is found in solid tumor (5).

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CALL FOR APPLICANTS Journal of Nuclear Medicine Technology EDITOR

The Publications Committee of the Technologist Section, Society of Nuclear Medicine, is beginning the process of recruiting, interviewing, and selecting a new Editor for the Journal of Nuclear Medicine Technology.

Technologist Section members are urged to take this opportunity to influence the Journal's direction. The editorship of the Journal is a three-year commitment to a very demanding but immensely rewarding position. The current JNMT Editor. Patricia Weigand, is serving the second year of her second three-year term; Technologist Section Bylaws limit the JNMT Editor to no more than two three-year terms.

If you are interested in applying for the editorship of the JNMT, please send the following information to Vince Cherico, Chairman, Publications Committee: a copy of your curriculum vitae with particular emphasis on your Technologist Section involvement, a listing of your publications (as primary author only), a listing of papers you have presented (include whether they were on the national, chapter, or local level). Note any awards or recognition you have received from the Technologist Section.

Also provide information on what, if any, previous publishing experience you have, in nuclear medicine or related areas; state your access to office facilities and secretarial assistance; provide a letter of support from your immediate supervisor, which refers to your availability during work hours and your access to office support, and office supplies and equipment.

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April 23-25, 1982

Bally (Headquarters Hotel) Sands, Brighton

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Program Coordinator, Maria DaCosta, along with the Scientific Program Committee Chairperson, Ted Rubel, announce the following plans for the Annual Spring Meeting of the Greater New York Chapter of the Society of Nuclear Medicine:

Friday

Clinical

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Saturday

Sunday

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The program is approved for VOICE credit.

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