Single Sample GFR Assessment

TO THE EDITOR: In your recent and very welcome Report of the Radionuclides in Nephrourology Committee on Renal Clearance (1), you were kind enough to recommend the method of Christensen and Groth (2), as simplified by Watson (3), as the method of choice for routine single sample GFR assessment. As presented in the report, the method was constrained to apply only to blood samples taken at exactly 3, 4 or 5 hr. In clinical practice, it is often impossible to take the blood samples at exactly the right time and so the method has been extended to apply to any time between 3 and 5 hr (4). All that is required is to replace the values of a and b in Equation 3 of the above report by:

and

$$a = t(0.0000017t - 0.0012)$$

$$b = t(1.31 - 0.000775t),$$

where t is the time in minutes between dose injection and blood sampling. With this modification, the method becomes much easier to use in clinical practice as the formulae for a and b can be incorporated into a simple computer program to calculate the clearance for a given sample time.

REFERENCES

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Advertising Nuclear Medicine

TO THE EDITOR: In a recent JNM Newsline article entitled "Sports Nuclear Medicine: An Emerging Field" by Deborah Kotz (J Nucl Med 1996;37:17N-23N), Kotz described the role of the bone scan in diagnosing athletic injuries. Furthermore, by using several case reports, she compared this nuclear medicine procedure with anatomical imaging modalities, such as CT and MRI. In her article she also acknowledges that the use of bone scintigraphy on athletes is not new: "For the past two decades, nuclear physicians have been performing bone scans on athletes. . . " Despite many years of clinical experience, why then is sports nuclear medicine still being considered an emerging field? The article mentioned the lack of anatomical resolution as being the bone scan's major clinical drawback and the main reason for not being used more often. However, I believe the main reason sports nuclear medicine is still an emerging field (despite vast clinical experiences) is that nuclear medicine physicians are not promoting it to our clinical colleagues. We have been improving our field with new and better radiopharmaceuticals and instrumentation, such as SPECT, but we have failed to tell the primary care physicians how we can help their patients. I recently attended a regional internal medicine conference and presented a lecture entitled, "Nuclear Medicine Imaging in Suspected Exercise-Induced Musculoskeletal Injuries." After the lecture ended, the general consensus among the attendees was that they learned more about musculoskeletal injuries in that hour than throughout their residencies. Furthermore, after this meeting many of the primary care physicians commented that they had not previously realized how helpful the "dark and unclear medicine specialty" could be in resolving certain diagnostic dilemma within their clinical practices.

I believe there are many things a nuclear medicine physician can do to export his useful medical concepts and diagnostic tools into other specialties. One of the ways we can compete and survive in this age of medical reform and containment is by (precisely) increasing our specialty's exposure. The following are a few suggestions of how we can both educate clinicians and advertise the nuclear medicine field to the clinical community:

1. We must increase our exposure locally by offering useful and clinically oriented lectures to our neighbor primary care physicians.

2. We must sponsor correlative imaging/disease conferences among the subspecialties that closely work with us. These include cardiology, endocrine, oncology and orthopedics. Comparing scan results with patients' outcomes is a way of increasing and maintaining our credibility within the other fields.

3. Large hospital-based nuclear medicine departments must actively participate in various academic activities such as morning reports and cancer conferences. (By being there, a nuclear medicine physician can give his expert opinion whenever a diagnostic dilemma arises and nuclear medicine can be of help.) In addition, we must volunteer to give basic clinically oriented nuclear medicine lectures to medical students and residents during their yearly general lecture series.

4. We must tell other non-nuclear medicine physicians about our clinically proven diagnostic and therapeutical tools by presenting more abstracts at their medical meetings and by publishing articles in several of their specialty journals.

5. Opening a web page in the Internet is another way of presenting nuclear medicine material to the clinician. Through it physicians around the world can quickly review cases and nuclear medicine notes without having to search in a medical library. In addition, clinicians will be able to ask any nuclear medicine questions by using the electronic mail option.

6. We must be always available, flexible and communicative in our practice when dealing with our referred patients.

7. None of the above recommendations will work if we do not strive to be true experts in our field.

The nuclear physicians' dream should consist of many fully developed and applicable nuclear medicine fields instead of having several chronically emerging fields. To reach this goal, we must work hard and let the clinician know about our specialty. Our image as a specialty needs to become the "light and clear medicine," instead of the "dark and unclear medicine."

The opinions or assertions contained herein are the private views of the author and are not to be constructed as official or as reflecting the views of the Department of the Army or the Department of Defense.

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Technetium-99m-Ethvlenedicvsteine: An Alternative Agent to Detect Renovascular Hypertension

TO THE EDITOR: The recent article by Taylor et al. (1) provides a useful overview of ACE inhibitor renography. The article describes several important aspects of captopril renography including radiopharmaceuticals used to detect renovascular hypertension. However, the authors did not mention captopril scintigraphy with 99mTc-ethylenedicysteine (EC) that we and others have recently reported to be useful in the detection and