Introduction to the Consensus Reports

The Radionuclides in Nephrourology Group consists of approximately 200 physicians and scientists from countries throughout the world who have been meeting on a regular basis approximately every three years since 1968. In 1992, the scientific committee of this Group, which is not affiliated with the Society of Nuclear Medicine, decided to establish three committees to develop consensus reports on the use of radionuclides to measure renal clearances, to detect renovascular hypertension and to detect obstructive uropathy. There were several factors that led to the decision to prepare these consensus reports. Widely varying technical procedures were being followed in all of these areas; different data were being collected, and it was often difficult to compare and interpret results from different centers. The scientific committee believed that some minimal standardization of procedures and protcols would enhance the utility of these tests, facilitate meta-analyses of the results and better identify problem areas. Second, the committee sought to raise the level of practice of renal nuclear medicine by clearly identifying specific procedures and interpretative criteria that are important in the performance of these tests. Third, a review

of these areas by an international panel of experts should serve as a timely contribution to the field. The three consensus reports were formally presented at the Ninth International Symposium of Radionuclides in Nephrourology held in Santa Fe in May 1995. Attendees at the Symposium were invited to submit comments to the respective chairs. The reports were subsequently completed in the Fall of 1995 and submitted for review to *The Journal of Nuclear Medicine*. Although there will undoubtedly be overlap between these consensus reports which represent an international viewpoint and the practice guidelines currently under development by the Society of Nuclear Medicine, the consensus reports and the practice guidelines are entirely different documents with complementary but different objectives, different sponsoring organizations and different organizing panels.

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Consensus on Diuresis Renography for Investigating the Dilated Upper Urinary Tract

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There is great variation in technique and interpretation of diuresis renography between different establishments. **Methods:** To address this problem, an International Consensus Committee was appointed by the Ninth International Symposium on Radionuclides in Nephrourology in 1994. **Results:** The final document was produced and addressed: objectives, equipment, data acquisition, choice of radiopharmaceutical, patient preparation, position, dosage of furosemide, timing of furosemide, role of bladder catheter, duration of study, pediatric considerations, evaluation of the furosemide response, interpretation, and conclusion. **Conclusion:** The report presents a standardized approach to diuresis renography that, if adopted, will improve reproducibility between centers, discourage unacceptable practice and stimulate further discussion between nuclear medicine and urology health care professionals who treat patients with dilated and obstructed upper urinary tracts.

Key Words: diuresis renography; technetium-99m-MAG3; furosemide

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Diuresis renography is widely accepted as a useful test for investigating the dilated urinary tract and discriminating between obstructed and nonobstructed systems (1-5). Unfortunately, there is still a great deal of variation in the performance and interpretation of the test between different centers (6). To address this problem, the Scientific Committee of the Ninth International Symposium on Radionuclides in Nephrourology established a Consensus Committee on Diuresis Renography in 1994. Members were nominated by the Scientific Committee or appointed by the chairperson. Several drafts were considered by the committee before the final document was considered at a meeting in Santa Fe, NM. This article incorporates the changes, suggestions and amendments that resulted from that discussion and subsequent correspondence.

BACKGROUND

There are many causes of dilatation of the upper urinary tract. It has become clear in recent years that not all of these are genuinely obstructive and a threat to renal function and health. Thus, the adage that "dilatation does not equal obstruction" has become an oft-repeated message. Static imaging methods tell

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