



# JRM<sup>®</sup>

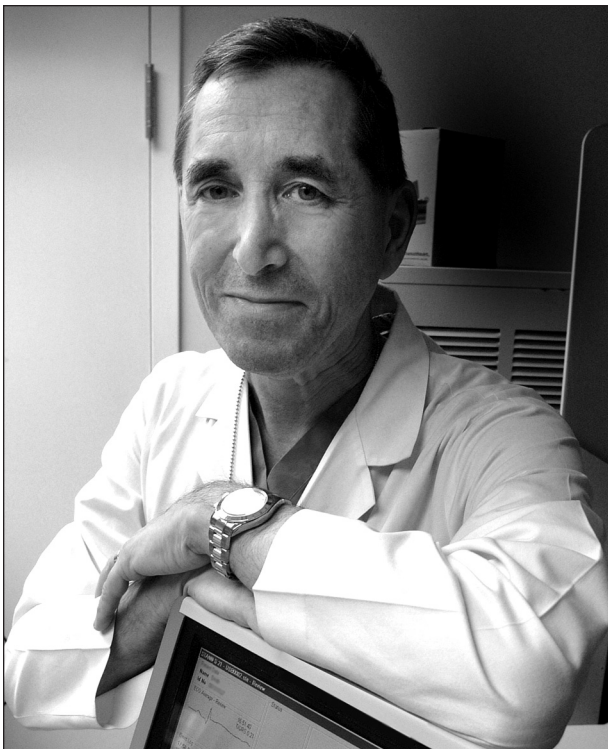
## The Journal of Reproductive Medicine<sup>®</sup>

Volume 56, No. 5-6/May-June 2011

## A Note from the Editor-in-Chief

Lawrence D. Devoe, M.D.

Welcome to the May-June 2011 Editor-in-Chief's page. In this issue I will focus on two studies related to important areas in clinical gynecology.



Lawrence D. Devoe, M.D., Editor-in-Chief

### In This Issue:

- ***Clinical Usefulness of Contrast-Enhanced Color Doppler Ultrasonography in Invasive and Non-invasive Gestational Trophoblastic Diseases: A Preliminary Study***  
M. Emoto, R. Sadamori, T. Hachisuga, T. Kawarabayashi and S. Miyamoto

While most gestational trophoblastic disease (GTD) is fortunately benign and augurs good outcomes using standard surgical and medical therapies, recognition of more aggressive lesions prior to treatment has always been of major concern. As there are significant consequences following both under- and overtreatment, any technique that permits better distinction of the more serious GTDs such as choriocarcinoma and invasive mole would be welcome. Emoto and coauthors have evaluated a relatively recent imaging technique that couples color Doppler ultrasonography (CDU) with contrast enhancement provided by microbubble contrast agents. In this limited series of 23 patients, all of those with malignant or invasive GTDs were correctly characterized by increased vascular flow captured by contrast-enhanced CDU, while those with noninvasive disease lacked these ultrasound findings. Importantly, small lesions (less than 2 cm) within the myometrium were identified. This hybrid im-

aging technique, which has been used successfully in echocardiography, is now being applied to other tissues of interest. Hopefully, this study will encourage the authors and others to pursue this line of investigation with larger cohorts.

- ***Is the Diagnosis of Atypical Glandular Cells of Undetermined Significance Associated with Greater Risk at an Inner City Hospital?***

*D. S. Heller, K. Goldman, L. T. Goldsmith and B. Cracchiolo*

When the Pap smear classification system was revised in 1998, yielding the so-called Bethesda classification scheme, two categories were added: atypical squamous cells of undetermined significance (ASCUS) and atypical glandular cells of undetermined significance (AGC). While ASCUS Pap smears are benign, the same cannot be said uniformly for their AGC counterparts. As the impact of this cytologic reading varies among populations, appropriate follow-up may need to be tailored to become group-specific. Heller and colleagues have performed a retrospective analysis of patients at their institution who had Pap smears read as AGC. Not entirely a surprise, these authors found that approximately one in three patients with such Pap smears had significant pathology, either cancerous or precancerous. This is a higher risk figure than previously reported in a comparable high-risk population (Zhao et al, *Acta Cytol* 2009;53:153–159) and among the highest rates ever reported for this cytologic category. How does this information help with the care of such high-risk patients? First and foremost, it mandates a more aggressive and

closer follow-up when an AGC Pap smear is reported. As the origin of the atypical glandular cells may originate from either endocervix or endometrium, greater care must be taken to ensure that both sites are adequately sampled. Finally, in the event that benign disease is initially detected, continued surveillance is essential since even conscientious screening can miss underlying disease.

*Editor's Comments:* Both studies have focused on improving approaches for detecting and eventually treating patients with cancerous or precancerous lesions of the reproductive tract, whether they be of pregnancy, cervical or uterine origin. The story of diagnosis and treatment of GTDs continues to be refined as illustrated by the first report. The ability to target even small lesions by their vascular flow properties has the potential to tailor subsequent care more appropriately. As contrast-enhanced ultrasonography continues to progress, this technique may see more applications in the areas of other gynecologic malignancies, specifically ovarian cancer.

Screening techniques, such as the Pap smear, have made substantial differences in the early detection and treatment of cervical and certain extracervical neoplasias. While populations at risk for these disorders have long been recognized, the best approaches for follow-up have been slower in coming. The second paper gives epidemiologic credence to classifying high-risk populations. This should provide a springboard for designing continued surveillance programs that will fit such patients better and promote improved long-term outcomes.