Editorial

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Maternal medicine: an evolving discipline

https://doi.org/10.1515/jpm-2018-0126

In April 2016 the *Journal of Perinatal Medicine* published its first issue dedicated to the emerging field of Maternal Medicine. The enthusiastic reader response has led to the current issue, which has a similar focus. In an editorial accompanying the previous issue it was emphasized that the discipline of Obstetric Medicine has developed as an area of subspecialty interest that transcends customary medical boundaries. By opening the traditional borders between obstetrics and internal medicine, it has involved many other specialties in collaborative efforts that have led to new avenues of investigation. Clinicians and investigators with special training or developed expertise in Maternal Medicine have acquired new knowledge, explored previously uncharted areas of clinical and basic science, and, most important, made pregnancy safer for women.

In this issue are 10 papers from nine different countries in Europe, Africa, Asia and North America covering a diversity of subject matter. They come primarily from departments of Obstetrics and Gynecology, in collaboration with several other specialty areas (Neonatology, Public Health, Patient Care Research and Child Health) that made major contributions. Several noteworthy offerings address relatively unexplored areas; others shed new light on familiar challenges.

Uterine rupture in women who labor with a cesarean scar from a prior pregnancy remains a potentially life-threatening situation, and its risk deters many women and doctors from attempting vaginal birth after a previous cesarean. Although the epidemiology and risks of attempts at vaginal birth with a scarred uterus are well researched, little is known about the basic processes of wound healing in the uterine wall. A group from China has helped to fill this knowledge gap with a detailed study of the histology and histochemistry of scars of various ages [1]. This kind of information is an important ingredient in our being able to understand how the uterus responds to surgical trauma and why its scar sometimes fails. This is a critical step in identifying women at risk and, eventually, learning how to achieve maximum strength in a scarred tissue.

In the area of medical complications of pregnancy, Lauring et al. [2] revisit the issue of what criteria to use for the diagnosis of gestational diabetes, a disease of increasing importance because of the epidemic of maternal obesity in much of the world. The choice of screening thresholds has always required balancing the sensitivity and specificity of a testing system. In this report the importance of cost is also addressed, because controlling medical care costs is of paramount importance in most economies. The fiscal and logistical burdens of screening large populations must be considered along with the medical and human risks and benefits in any analysis of a population-based screening protocol. Screening for the much less common, but still very important, problem of inherited thrombophilias is addressed by a group of Polish researchers [3]. They recommend thrombophilia screening for women with a history of certain adverse pregnancy outcomes, and emphasize that screening guidelines must consider the expected prevalence of various mutations in the screened population. Both studies are important to consider in creating public health screening guidelines. An important message is that pregnancy outcomes in women with thrombophilias are variable, and that ethnicities and comorbidities add to the complexity of this issue. The comprehensive report of catastrophic antiphospholipid antibody syndrome sheds light on some of the basis for this complexity [4].

A report from the US describes a new approach to screening maternal blood as a noninvasive means to assess fetal lung maturation [5]. The concentration of hLPCAT1 mRNA in maternal plasma correlated well with levels of lamellar bodies in simultaneously obtained amniotic fluid. These findings suggest a potential role for such maternal analyses in fetal assessment; in addition they provide insight into the nature and function of the fetal maturational transcriptome.

These and other papers in the current issue of the journal provide a great deal of useful information. We look forward to further issues that will provide more insight into the breadth and depth of the burgeoning discipline

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of Maternal Medicine. We encourage collaborative, interdisciplinary work in this field as pregnancy becomes more prevalent in women with underlying complex medical conditions.

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