

# Itchy and Pregnant? Consider Range of Causes

BY MARY ELLEN SCHNEIDER

EXPERT ANALYSIS FROM THE  
SDEF WOMEN'S & PEDIATRIC  
DERMATOLOGY SEMINAR

SAN FRANCISCO – When a pregnant woman presents with a complaint of itching, consider a range of causes, not just those triggered by pregnancy, Dr. Bethanee J. Schlosser advised.

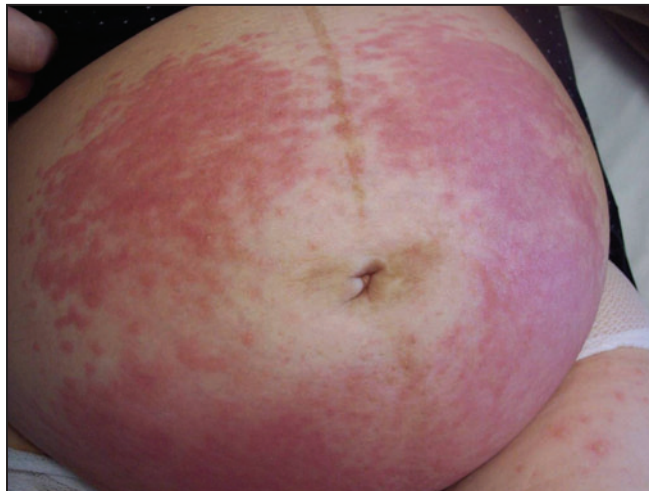
Although some dermatoses of pregnancy are common, a pregnant woman's itching may have nothing to do with her pregnancy and could be the result of contact dermatitis, drug eruption, scabies, folliculitis, or another cause, Dr. Schlosser said at the meeting sponsored by Skin Disease Education Foundation (SDEF).

"Just because they're pregnant doesn't mean they only have to fit in the pregnancy dermatoses box," Dr. Schlosser of the department of dermatology, and director of the women's skin health program, at Northwestern University in Chicago, said in an interview.

With that said, the two most prominent dermatoses of pregnancy are pruritic urticarial papules and plaques of pregnancy, a condition now known under the umbrella term polymorphic eruption of pregnancy, and pemphigoid gestationis, previously called herpes gestationis.

Polymorphic eruption of pregnancy occurs in about 1 in 300 pregnancies and is generally associated with multiple gestations and increased maternal weight gain. It is also more common in women having their first child. The mean onset is at about 35 weeks, but in about 15% of cases, the onset can be post partum, according to Dr. Schlosser.

Pemphigoid gestationis is a rare acquired



Classic umbilical sparing is seen in this case of polymorphic eruption of pregnancy.



Erythematous edematous papules and vesicles are evident on the palm in this case of pemphigoid gestationis.

autoimmune blistering disease unique to pregnancy. It occurs in 1 in 50,000 pregnancies and is probably the least common dermatosis of pregnancy. The onset is usually in the second or third trimester, but in about 14% of cases, the onset can occur post partum. With pemphigoid gestationis, there is no change in maternal outcome, but there are risks to the fetus including being small for gestational age, preterm delivery, and neonatal pemphigoid disease.

Typically, patients with the polymorphic eruption present with "hivelike" or urticarial papules and plaques, but no blisters, while women with pemphigoid gestationis often have more blistering. However, the clinical presentations and the routine histopathology can be identical, she explained. "I've seen patients with both entities, with both kinds of clinical features," she noted. "If it's in your differential diagnosis and you can't distinguish 100% clinically, then that's where the util-

ity of biopsy comes in."

Cutaneous biopsy is a common procedure and is low risk, she reported, even in the context of pregnancy. Routine histopathology and direct immunofluorescence are essential in terms of differentiating between pemphigoid gestationis and polymorphic eruption.

The first-line treatment for both conditions is topical corticosteroids and oral antihistamines when the condition is mild or localized and systemic corticosteroids in severe cases. Although the treatments are generally the same, the difference between the two conditions is not academic, she said, because the potential sequelae and considerations for mother and child are different.

Dr. Schlosser also recommended that dermatologists make it a priority to communicate with the referring physician, specifically to review the risks to both the mother and child that may be associated

with a particular skin condition or its treatments. For example, polymorphic eruption of pregnancy is generally non-threatening to the mother and child. But Dr. Schlosser said she has seen patients with widespread, severe polymorphic eruptions who have needed treatment with systemic corticosteroids. That's essential information for the ob.gyn.; if the patient has a cesarean delivery, the patient will likely require stress-dose corticosteroids. Similarly, the newborn would need to be monitored for hypoglycemia during the immediate after-birth period.

"That doesn't mean that dermatologists shouldn't treat pregnant women aggressively, when appropriate," she said. "But the entire multidisciplinary care team needs to be kept informed so that the risks can be managed."

Dr. Schlosser said she had no relevant financial disclosures. SDEF and this news organization are owned by Elsevier. ■

## Maternal Smoking May Increase Future CVD in Children

BY NANCY PHAM

FROM THE EUROPEAN  
HEART JOURNAL

Healthy prepubescent children with mothers who smoked during pregnancy have lower levels of high density lipoprotein (HDL) cholesterol compared with children born to women who do not smoke during pregnancy, Dr. Julian G. Ayer of the University of Sydney, and his colleagues, reported.

Previous studies have shown an association between environmental tobacco smoke (ETS) exposure in adults and cardiovascular disease (CVD) and an increase of the thickening of the arterial wall and lipid alterations associated with atherosclerosis. Thus, Dr. Ayer and associates decided to examine the effects of maternal smoking in pregnancy on the lipoprotein levels and arterial wall thickness in 8-year-old children and to determine whether smoking during preg-

nancy could increase the risk of CVD in children later in life (Eur. Heart J. 2011 [doi:10.1093/eurheartj/ehr174]).

"Cholesterol levels tend to track from childhood to adulthood, and studies have shown that for every 0.025-mmol/L increase in HDL levels, there is an approximately 2%-3% reduction in the risk of coronary heart disease," Dr. David Celermajer, Scandrett Professor of Cardiology at the university, who led the study, said in a written statement. "If we extrapolate this, we can suggest that the difference of 0.15 mmol/L between children of smoking mothers versus non-smoking mothers might result in a 10%-15% higher risk for coronary disease in the children of smoking mothers. This is an approximation only, but the best one we have."

Results showed that children born to mothers who smoked during pregnancy had lower HDL cholesterol (1.32 vs. 1.50

mmol/L), higher triglycerides (1.36 vs. 1.20 mmol/L) and higher systolic blood pressure (102.1 vs. 99.9 mm Hg).

When postnatal ETS exposure and other confounders such as breastfeeding duration, physical inactivity, and maternal exposure to passive smoking during pregnancy were factored into the study, the children still had lower HDL cholesterol, (difference of 0.22 mmol/L) but had no significant difference in systolic blood pressure. When excluding postnatal ETS exposure and including all other confounders, the difference was about -0.14 mmol/L. There was no significant difference in carotid intima-media thickness (CIMT) due to smoking in pregnancy or postnatal ETS exposure.

The participants in the study included 616 newborns from Sydney who were enrolled into the Childhood Asthma Prevention Study (CAPS), a randomized controlled trial investigating

for asthma and allergic disease in children from birth to 5 years of age between September 1997 and December 1999. At 8 years of age, 405 of the 616 children (66%) had parental consent to participate in a cardiovascular substudy that examined the effect of the dietary intervention on CVD risk factors. Three hundred twenty-eight children (53%) had permission to participate in the lipoprotein examination.

Using a questionnaire at an in-person interview, mothers were asked about their smoking habits during all three trimesters of their pregnancy as "1-10/day," "11-20/day," "20-40/day," or "greater than or equal to 41/day." The smoking average was then calculated during mid-point values for each range (5, 15, 30, and 50, respectively).

Dr. Ayer and associates reported that results may be important in the prevention of atherosclerosis as about 15% of women in Western countries

smoke during pregnancy.

"Children born to mothers who have smoked during pregnancy will need to be watched particularly carefully for other coronary risk factors, like high blood pressure, high LDL, 'bad' cholesterol levels, and especially cigarette smoking themselves," Dr. Celermajer said in the statement.

He suggested that HDL levels can be increased with frequent physical activity and medications such as niacin.

Researchers received funding from an Australian Government National Health and Medical Research Council Project Grant and a Pfizer CVL Grant. Funding was also provided by the National Health and Medical Research Council of Australia; Cooperative Research Centre for Asthma, New South Wales; Department of Health; and Children's Hospital at Westmead.

The researchers reported no relevant financial disclosures. ■