

This infant with intrauterine herpes simplex virus has deep atrophic and ulcerative lesions suggesting epidermolysis bullosa or aplasia cutis congenita.



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## Vesiculopustular Disorders in Infants a Diagnostic Challenge

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MIAMI BEACH — Several neonatal vesiculopustular disorders can be life threatening, yet difficult to diagnose, Dr. Ronald C. Hansen said at the annual Masters of Pediatrics conference sponsored by the University of Miami.

Neonatal herpes simplex is among the

most severe perinatal infections. The case-fatality rate is up to 85% in untreated neonates. As many as two-thirds of the survivors will have some, often neurologic, permanent disability. Infection with herpes simplex virus (HSV) is usually transmitted during labor and delivery, but in only about half of cases will there be a well-documented history of maternal exposure, said Dr. Hansen, professor of dermatology and pediatrics at Phoenix Children's Hospital.

Neonatal herpes can be a tough diagnosis because there are three different clinical patterns of infection: It can be mucocutaneous, can involve the central nervous system, or can be disseminated and involve multiple organs.

Skin lesions can be seen in all three patterns. Vesicles may be single or disseminated, lack an erythematous base, or be large, crusted coalescent erosions, not necessarily where the skin touched the cervix.

Biopsy can be helpful for confirming diagnosis, but it is no longer the preferred method. Rapid methods such as polymerase chain reaction assays, direct fluorescent antibody tests, and viral cultures are now available. Antiviral therapy with acyclovir is useful, but prognosis can be poor even if the child looks healthy and its cerebral spinal fluid is negative, he said.

Only 5% of all neonatal HSV cases are caused by in utero transmission, but that possibility should still be considered. Many of the infants don't appear sick despite multiorgan involvement. Infected infants are often premature and typically present with evidence of chronic infection, atrophy, and scars suggestive of epidermolysis bullosa or aplasia cutis congenita.

A high index of suspicion and the above studies for HSV are needed to confirm the diagnosis. If biopsies are performed, one should biopsy the skin because cultures of the nose, throat, rectum, and spinal fluid can be negative, Dr. Hansen said.

Bullous mastocytosis also may present with vesicles in the newborn period, and is readily confused with HSV or epidermolysis bullosa. Bullous mastocytosis is a rare form of mast-cell disease that can be distinguished clinically by its characteristic layering of blood in flat, intact blisters and red, wrinkly skin. A biopsy anywhere on the body would be positive because of the diffuse infiltration of the skin by mast cells, Dr. Hansen said.

Fetal varicella syndrome is another easy-to-miss diagnosis. Characteristic features include cicatricial lesions with a segmental or dermatomal distribution, and atrophic plaques that can resemble pansclerotic morphea. Other features can include neurologic and eye abnormalities, gastrointestinal and genitourinary malformations, and hypoplasia of one limb.

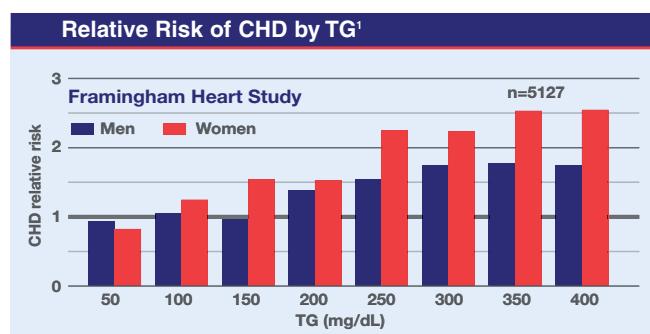
The risk of fetal varicella syndrome in children exposed to chickenpox in utero in the first trimester was estimated at 9%, although newer studies put it at only 1%-2%.

One should also consider neonatal varicella, which can be fatal. The disease is said to be more likely and more severe if the mother develops varicella 5 days before or 2 days after delivery.

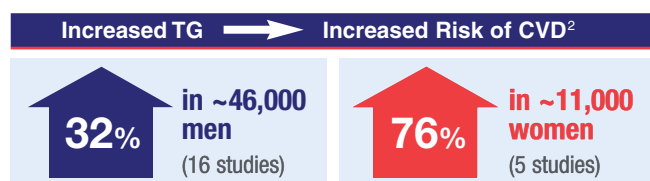
## What TG means to a woman's heart

### Elevated Triglycerides Make a Difference in Women's Risk of CHD

While great attention and clinical efforts have been directed toward LDL-C-lowering, the Framingham Heart Study 30-year follow-up clearly showed that elevated triglycerides (TG) are also associated with an increased relative risk of coronary heart disease (CHD) — especially in women.<sup>1</sup>



In addition, meta-analyses demonstrated that every 1 mmol/L (89 mg/dL) increase in TG increased cardiovascular disease (CVD) risk by:<sup>2</sup>



#### CHD is the #1 Killer of Women

The effect of elevated TG in women is important to keep in mind in view of the fact that CHD is the single leading cause of death among American women, claiming nearly 500,000 lives each year.<sup>3</sup> Menopausal women are particularly at risk, with CHD rates 2 to 3 times those of women the same age who are premenopausal.<sup>3</sup>

#### CHD Risks With Diabetes or Metabolic Syndrome\* in Women: Role of TG and HDL-C

Of the estimated 16 million Americans with diabetes, more than half are women.<sup>4</sup> In women, diabetes is a powerful risk factor for CHD, increasing CHD risk 3-fold to 7-fold compared to a 2-fold to 3-fold increase in men.<sup>5</sup> It has also been shown that metabolic syndrome is associated with a 2-fold risk of CHD mortality in women.<sup>6</sup> **It is important to note that the most common pattern of dyslipidemia in patients with type 2 diabetes is elevated TG levels and decreased HDL-C levels.<sup>7</sup>**

\*At least 3 of the 5 criteria: abdominal obesity with waist circumference >102 cm in men and >88 cm in women; triglycerides  $\geq$ 150 mg/dL; HDL-C <40 mg/dL in men and <50 mg/dL in women; blood pressure  $\geq$ 130/85 mmHg; fasting glucose  $\geq$ 110 mg/dL.<sup>8</sup>

#### More Aggressive Guidelines for TG and HDL-C

While LDL-C lowering is recognized as the primary lipid target to reduce CHD morbidity and mortality, it does not remove all risk.<sup>9</sup> Recent data has shed more light on the role of increased TG and decreased HDL-C in CHD risk. It is critical that these lipid abnormalities be considered and managed, in addition to LDL-C. In fact, the current National Cholesterol Education Program (NCEP) guidelines recommend more aggressive TG and HDL-C target goals.<sup>8</sup> The American Heart Association (AHA) and American Diabetes Association (ADA) recommend similar aggressive goals for TG (<150 mg/dL) and HDL-C (>50 mg/dL) in CVD prevention for women.<sup>10,11</sup>

#### You Can Help Make a Difference

A majority of women are still not aware of the substantial CHD risks posed by abnormal lipid levels.<sup>12</sup> As a physician, you can help make a difference by raising your female patients' awareness of these issues, and by helping them achieve optimal lipid levels, as recommended by the NCEP, the AHA and the ADA.

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