

Faxnotes July 17, 2006

MEDICAL UPDATE

Acanthosis nigricans

Almost everyone involved in the practice of pediatrics today is seeing children and adolescents with acanthosis nigricans (AN). In fact, you may be having patients referred to your practice by school nurses who are screening for AN in many local districts. Families are told to see their doctor about the dark area on their child's neck, but there remains much confusion about what the next step should be.

AN is a velvety thickening and hyperpigmentation that occurs on the neck, axillae, and other skin folds, often in areas of friction. The darkening of the skin is due to the thickness of the keratin containing superficial epithelium, not to a change in melanocyte number or melanin content. It is not ameliorated by scrubbing or topical medications. The presence of AN is commonly associated with hyperinsulinemia and obesity. Thus, in an attempt to identify students with elevated insulin levels, or "pre-diabetes", schools are screening for AN. However, studies are unclear about whether all children with AN deserve further investigation.

The American Diabetes Association's Standards of Medical Care in Diabetes for 2006 recommends testing for type 2 diabetes in the following setting:

1. Children who are overweight (BMI >85th percentile for age and sex)
2. And any two of the following criteria:
3. Family history of type 2 diabetes in a first or second degree relative
4. Race/ethnicity at high risk (Native American, African American, Latino, Asian American, or Pacific Islander)
5. Signs of insulin resistance or conditions associated with insulin resistance (Acanthosis nigricans, hypertension, dyslipidemia, polycystic ovary syndrome)
6. Maternal history of diabetes or gestational diabetes
7. Screen at age 10 years or at onset of puberty if this occurs prior to 10 years
8. Screen every two years
9. Fasting plasma glucose is the preferred test

Of course, it should be noted that the above recommendations refer to screening for diabetes, and not the assessment of a hyperinsulin state. Some clinicians recommend that all children with acanthosis be screened with a fasting insulin level, and consideration given to an oral glucose tolerance test for those with insulin levels over 15 micro iu/ml. However, other papers suggest that it is the level of visceral adipose tissue and not the degree of AN that best correlates with elevated insulin levels. Clinical judgment based on the degree of obesity, other signs and symptoms, and family history must be used to determine how to approach the individual patient with AN.

At minimum, clinicians should be documenting height, weight, and BMI on the growth chart. If a child at any age, with or without AN, is over the 85th percentile BMI for age and sex, a discussion of weight should occur with the family. At a BMI greater than 95th percentile, consideration should be given to further testing for obesity co-morbidities (hypertension, dyslipidemia, etc.) and a weight management program initiated.

For more information, contact LeAnn Kridelbaugh, M.D., board certified physician nutrition specialist and director of Dean Foods LEAN Families program, at leann.kridelbaugh@childrens.com.

SERVICE UPDATE

Specialty Center of Plano

Children's Specialty Center of Plano continues to provide services to children in northern regions of the metroplex. Located in the medical office building at Presbyterian – Plano, the specialty center offers appointments for otolaryngology and audiology services. Pediatric Otolaryngology/ENT specialists Amy Coffey, M.D., Ron Deskin, M.D., John McClay, M.D. and Kathy Thompson, PNP, pediatric nurse practitioner, are accepting patients. To make a referral, providers may call 469-241-0580. Children's offers other outpatient services in this area at the Ambulatory Care Pavilion in Legacy. To refer a patient there, call 1-800-CHILD-Rx (244-5379).

PEDIATRIC GRAND ROUNDS Wednesdays at 8 a.m. in the Children's auditorium, also available via videoconference at selected Texas Health Resources hospitals (Arlington Memorial Hospital, Harris Methodist Hospitals & Presbyterian Healthcare System). For CME information, contact the UT Southwestern continuing medical education at 214-648-3705.

July 19 CPC: "A 15-Month-Old Girl with Vomiting," Linda Margraf, M.D., Professor of Pediatrics, Department of Pathology, Dan Bowers, M.D., Assistant Professor of Pediatrics, Division of Hematology-Oncology, and Bradley Barth, B.A., M.P.H., M.D., Assistant Professor of Pediatrics, Division of Gastroenterology, UT Southwestern.

July 26 "Being Keen on the Spleen: A Primer on the Spleen, Splenomegaly and Splenectomy," George Buchanan, M.D., Director and Professor of Pediatrics, Division of Hematology-Oncology, Distinguished Chair in Pediatric Oncology and Hematology, Director of Barrett Family Center for Pediatric Oncology, UT Southwestern.

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