**Hemangioma Risk Tied to Low Birth Weight**

**BY PATRICE WENDLING**

**CHICAGO** — A recent multivariate analysis found that low birth weight is the single most significant risk factor for having a hemangioma of infancy. These findings come at a time when the rates of preterm and low birth-weight in- infants continue to rise in the United States, mainly because of assisted reproductive technologies, Dr. Ilona J. Frieden said at the American Academy of Dermatology’s Academy 2008 meeting.

In 2005, 8.2% of infants born in the United States weighed 2,500 g or less— the highest percentage since 1968. Physicians can expect to see more hemangioma pa- tients, and should use anatomic location and growth patterns to assess risk and management options, she said.

If hemangioma presents in preterm infants, 50,000 infants in 2005 in the United States would have one or more infan- tile hemangiomas, compared with 20,000 in 1985, said Dr. Frieden, director of pediatric dermatology at the University of California, San Francisco.

The new findings are based on research by the Hemangioma Investigator Group (HIG) that compared 420 infants with hemangiomas with 353 patients without hemangiomas seen for other skin prob- lems. With use of multivariate logistic re- gression analysis, low birth weight was identified as the single most significant risk factor for having a hemangioma.

For each 500-g de- crease in weight from a control group of 3,000 g to 3,500 g in- fants, there was a 29% increase in risk, Dr. Frieden said.

The current study whittles down a list of significant risk factors identified by an earli- er HIG study that included female gender; white, non-Hispanic race; prematurity; low birth weight; multiple gestation; and advanced maternal age (J. Pediatr. 2007;150:291-4).

Most hemangiomas of infancy can be classified as “segmental” or “localized,” she postulated. Segmental hemangiomas cover a broad anatomic region or recog- nized developmental unit such as the en- tire ear, while localized hemangiomas are confined spatially and often appear to arise from a central focal point.

Prior research has shown that segmental lesions are larger, require more inten- sive and prolonged therapy, and are more frequently associated with developmental abnormalities, com- plications, and a poor- er overall outcome (Arch. Dermatol. 2002;138:1167-76).

More recent data from the HIG, an in- ternational consort- ium of researchers, confirmed these findings. Infants with segmental hemangiomas were found to be 11 times more likely to experience complica- tions and 8 times more likely to re- ceive treatment than those with lo- calized hemangiomas (Pediatrics 2006; 118:882-7). The effect persists, even when controlled for size, Dr. Frieden said.

In addition to distribution, hemangi- omas have distinct growth patterns, sug- gesting a critical period of intervention in the first few weeks to months of life. HIG findings to be published in an upcoming issue of Pediatrics indicate that heman- giomas reach 80% of their maximum size at a mean age of 3 months. By 5 months of age, 80% of hemangiomas have com- pleted their growth, she said. Segmental hemangiomas were found to present 1 month earlier, yet were 10 times larger than were localized hemangiomas.

Intervention, when necessary, is best during this early period because treat- ments such as systemic corticosteroids work better at preventing growth than shrunken estimated lesions, Dr. Frieden said.

She proceeded to highlight a pilot study in France that showed rapid improvement with the use of propranolol in nine infants with severe infan-tile hemangiomas (N. Engl. J. Med. 2008;358:2649-51).

Dr. Frieden characterized the findings as very exciting, but cautioned that the drug’s use in infants is off label and that there is no consensus on how to monitor for side effects in very young children. Potential side effects include hypoglycemia, brady- cardia, hypotension, and exacerbation of asthma, she noted.

Dr. Frieden said in an interview that she has started two children with complica- ted segmental hemangiomas on propra- nolol, but after just 4 weeks, it is too ear- ly to say if it is helping.

Dr. Frieden is a consultant for Pierre- Frabre Dermaco, and is planning drug studies with propranolol.

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**Obstetrics**

**Post-Cesarean Pain Can Be Forecasted**

**BY SUSAN BIRK**

**CHICAGO** — Anticipated pain, anxiety, and sensitivity to standard- ized audio tones can predict a woman’s pain experience and narcotic requirements following cesarean section, according to a study of 118 recipients of elective C-sections, according to a study of 118 recipients of elective C-sections, according to a study of 118 recipients of elective C-sections, according to a study of 118 recipients of elective C-sections.

“These findings indicate that sim- ple questions prior to cesarean sec- tion can help providers identi- fy patients who may be at risk for inadequate pain control and subsequent development of persistent pain and depres- sion,” Dr. Ashley M. Tonidandel said.

Most of the patients were under- going repeat C-sections, and the rest were undergoing primary sec- tions for breech and other reasons.

During the preoperative anesthet- ic consultation, patients were asked a set of questions regarding their level of anticipated pain and anxiety. They also rated the loudness of a series of tones with a visual analog scale.

Chart reviews provided data on ac- tual narcotic usage in the postanaes- thesia care unit and 24 hours after surgery.

Assessments of resting pain, evoked pain, and satisfaction with pain control also were conducted 24 hours after surgery using the same visual analog scale.

The model used in this study also may have potential applications for patients undergoing other types of surgery, they said.

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**Mother’s Thyroid Disease Linked to Congenital Heart Abnormalities**

**MONTEREY, CALIF.** — Women with thyroid disease are 50% more likely to have a child with left ventricu- lar outflow tract obstruction than women without thy-roid disease, according to a study that compared about 6,000 women in each of the two groups.

In particular, the risk of aortic valve stenosis or constriction of the aorta appeared to be elevated, Marilyn L. Browne of the New York State Department of Health and her colleagues wrote in a poster pre- sentation at the annual meeting of the Teratology So- ciety.

There were no other statistically significant associ- ations between maternal thyroid disease and congen- ital cardiovascular malformations.

The multicenter case control study was part of the National Birth Defects Prevention Study (NBDPS), which collects data from 10 regions in the United States. The investigators identified 6,068 women with a thyroid disease whose babies were born between Oc- tober 1997 and December 2004 and compared them with 5,875 controls.

There were no significant demographic differences between the case and control groups, they reported.

The odds ratios were adjusted for potential confounders, including maternal age, race/ethnicity, edu- cation, prepregnancy BMI, gestational diabetes, smok- ing, alcohol use, and the state of residence at time of delivery.

The investigators acknowledged that their study did not identify the women’s underlying thyroid conditions. They recommended that additional studies should evaluate the risks of amithyroid medication and should ex- aminate risk by type of thyroid disorder.

Ms. Browne stated she had no conflicts of interest to disclose related to her presentation.

—Robert Finn