Migraine Drugs Not Tied to Birth Defects

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PHILADELPHIA — Sumatriptan and naratriptan do not appear to significantly raise the risk of major congenital malformations in fetuses that are exposed to the drugs in utero, according to the latest analysis of an international pregnancy registry.

Established in 1996, the GlaxoSmithKline registry has accumulated data on 849 pregnancies exposed to the drugs. Birth defects occurred in 4.5% of infants exposed in the first trimester or during all of their gestation, which was not significantly higher than that pre-viously identified for women with migraines.

Major congenital malformations are known to occur in the offspring of women with migraines at a slightly higher rate than in the general population (3.4% vs. 2%-3%, respectively), Marianne C. Cunningham, Ph.D., of GlaxoSmithKline in Harlow, England, reported in a poster at the International Headache Congress.

The registry relies on a vol-untary reporting strategy that encourages health care providers to submit information on exposed pregnancies as early as possible. Retrospective case reporting also is accepted, but pregnancy outcome is ascertained by medical records that the provider forwards after birth, or by medical records confirming other outcomes, including fetal demise or abortion.

At the outset, the registry col-lects data on the timing, dosage, duration, indication, and admin-istration of the drugs; maternal demographics; expected date of delivery; and any prenatal test-ing. Among the registry’s databases is a review of the pregnancy outcome, drug exposure during pregnancy, and the women’s headache his-tory during pregnancy.

So far, the registry has as-sessed information on 763 pregnancies exposed to suma-triptan and 88 exposed to nara-triptan. Outcomes are known for 570 of the sumatriptan-ex-posed pregnancies and 57 of the naratriptan-exposed pregnan-cies. Twenty-one sumatriptan-exposed pregnancies and 31 naratriptan-exposed pregnancies are included among those that have been lost to follow-up, Dr. Cunningham noted in the poster at the congress, which was sponsored by the International Headache Society and the American Headache Society.

Among the sumatriptan-exposed pregnancies, there were 23 birth defects, 4 fetal deaths, 32 spontaneous fetal losses, and 11 induced abortions.

The malformations that oc-curred in infants who were ex-posed to sumatriptan in the first trimester included abnormal head circumference, single palmar crease and systolic murmurs, moderate craniosynostosis; cerebral ab-normality with developmental delay; partial cleft lip; ventricular septal defects; bilateral atresia; diaphragmatic hernia; pyloric stenosis; anterior dis-placement of anus; hip dysplasia; polydactyly; malformation of left hand; and Down syndrome.

No data were available for the three birth defects that oc-curred in infants who were ex-posed to sumatriptan after the first trimester.

Among fetuses exposed to naratriptan, there were five spontaneous losses, one in-duced abortion, and one live infant with a 2.5-mm ventricu-lar septal defect that was ex-pected to close spontaneously.

Dr. Cunningham noted that five additional independent stud-ies, including a Swedish study of more than 2,000 sumatriptan re-cipients, have failed to find an in-crease in birth defects associated with in utero exposure. “While its use in pregnancy cannot be encouraged,” the other colleague Sara A. Ephross, Ph.D., wrote, “there is consistent evi-dence that sumatriptan is not associated with a substantial in-crease in the risk of major congenital malformations following exposure.”

To report pregnancies exposed to sumatriptan, naratriptan, or the sumatriptan/naproxen combination, North American physi-cians can call 800-336-2176, and international physicians can call 910-256-0549.

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