High-dose erythropoietin no benefit for extreme preemies

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(HealthDay)—For extremely preterm infants, high-dose erythropoietin treatment from 24 hours after birth does not result in a reduced risk for severe neurodevelopmental impairment or death at age 2 years, according to a study published in the Jan. 16 issue of the *New England Journal of Medicine*.

Sandra E. Juul, M.D., Ph.D., from the University of Washington in Seattle, and colleagues conducted a randomized trial of high-dose erythropoietin involving 941 infants born at 24 weeks 0 days to 27 weeks 6 days of gestation. A total of 741 infants were randomly assigned to receive either erythropoietin (376 infants) or placebo (365 infants) within 24 hours of birth. Erythropoietin was administered intravenously at a dose of 1,000 U/kg body weight every 48 hours for a total of six doses, followed by a lower maintenance dose of 400 U/kg body weight three times per week administered by subcutaneous injection through 32 completed weeks of postmenstrual age.

The researchers observed no significant between-group difference in the incidence of death or severe neurodevelopmental impairment at age 2 years (26 versus 26 percent; relative risk, 1.03; 95 percent confidence interval, 0.81 to 1.32; P = 0.80). No significant between-group differences were seen in the rates of retinopathy of prematurity, intracranial hemorrhage, sepsis, necrotizing enterocolitis, bronchopulmonary dysplasia, or death or in frequency of serious adverse events.

"We did not observe that treatment with high-dose erythropoietin in extremely preterm infants resulted in a lower risk of death or in better neurodevelopmental outcomes at 2 years of age than placebo," the authors write.

One author disclosed financial ties to Best Doctors.

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