War between the sexes begins before twins' birth

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The battle of the sexes may begin in the womb, researchers from Tel Aviv University believe. And it may have troubling consequences — a male twin can compromise the health of his twin sister before she is born.

In a new study recently published in the journal Pediatrics, the researchers analyzed the incidence of complications, such as respiratory distress syndrome, found in pre-term twins. When born premature, girls who share the womb with a boy twin lost the respiratory health advantage normally seen in premature girl infants, they discovered.

“The male disadvantage, the study suggests, seems to be transferred from the boy to the girl in utero,” says Prof. Brian Reichman, a lecturer in pediatrics at Tel Aviv University’s Sackler School of Medicine.

Compared to premature twin boys, premature twin girls had a 60 percent advantage. The premature twin girls tended not to develop respiratory distress syndrome and chronic lung diseases sometimes found in premature infants. This advantage was lost in infant girls with a male twin.

This new study is expected to help pediatricians better understand the health risks and outcome of premature babies.

Prof. Reichman helped analyze the data collected by the Israel Neonatal Network comprising 8,858 very low birth weight infants (1 to 3 pounds) born prematurely at 24 to 34 weeks’ gestation. The study data covered infants born between 1995 and 2003 and included singletons, same-sex and mixed-sex pre-term twins.

The TAU study is somewhat unusual. Twin studies tend to focus on what happens after birth, when complicated environmental and learned behavioral factors come into play. “The effects are occurring already in the uterus,” says Prof. Reichman, citing studies showing that females with male twins may be more masculinized later in life.

A Pediatrics commentary on the research, "Beware of the Weaker Sex: Don't Get Too Close to Your Twin Brother," by Dr. David K. Stevenson, Department of Pediatrics, Stanford University; and Dr. Jon E. Tyson, Department of Pediatrics, University of Texas Medical School, sums up the findings. “For the time being, there remains some biological truth to the old nursery rhyme that boys are made of ‘snakes, snails and puppy dogs’ tails,’ and ‘girls are made of sugar and spice and everything nice.’

“Perhaps nature knows something we do not,” Drs. Stevenson and Tyson write.

Source: American Friends of Tel Aviv University