

# Males with a female twin may be at higher risk for anorexia nervosa

3 December 2007

Males who have a twin sister appear more likely to develop the eating disorder anorexia nervosa than other males, including those with a twin brother, according to a report in the December issue of *Archives of General Psychiatry*, one of the JAMA/Archives journals. This finding supports the hypothesis that exposure to female sex hormones in the womb may be related to the risk for anorexia nervosa.

“Anorexia nervosa is approximately 10 times more common in females than in males,” the authors write as background information in the article. “The reasons for this difference are not known, and it is likely that their unraveling will represent an important step forward in the understanding of the etiopathogenetic factors involved in the development of eating disorders.”

Marco Procopio, M.D., M.R.C.Psych., of the University of Sussex, Brighton, England, and Paul Marriott, Ph.D., of the University of Waterloo, Ontario, Canada, analyzed data from a study of Swedish twins born between 1935 and 1958. Two sets of diagnostic criteria, one broader and one more narrow, were used to determine which twins had anorexia nervosa.

Overall, female twins were more likely than male twins to develop anorexia nervosa. The one exception was among males who had a dizygotic (fraternal) twin sister. “In fact, their risk is at a level that is not statistically significantly different from that of females from such a pair,” the authors write. Among 4,478 dizygotic opposite-sex twins, 20 females and 16 males had anorexia nervosa using narrow criteria and 32 females and 27 males qualified under the broad criteria. Risk for these female twins was not significantly different from than that of other female twins.

“A plausible explanation for this phenomenon is that in pregnancies bearing a female fetus, a substance is produced, probably hormonal, that

increases the risk of having anorexia nervosa in adulthood,” the authors write. “Because the male half of an opposite-sex twin pair would also be exposed to this substance, it could account for the observed elevated risk in males with female twins. The most likely candidates are sex steroid hormones.”

Source: JAMA and Archives Journals

APA citation: Males with a female twin may be at higher risk for anorexia nervosa (2007, December 3) retrieved 22 September 2019 from <https://medicalxpress.com/news/2007-12-males-female-twin-higher-anorexia.html>

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