Sertraline May Harm Sperm: Study

By Reuters Staff

NEW YORK - The selective serotonin reuptake inhibitor (SSRI) sertraline may have adverse effects on sperm, something that should be considered in men who are trying to start a family, say researchers from Iran.

In a study of men with primary premature ejaculation, they observed that sertraline reduced sperm concentration and percentage of sperm with normal morphology and increased percentage of DNA fragmentation.

Primary premature ejaculation is one of the most common sexual disorders in men. Because the etiology of the disorder remains unclear, no drugs are currently approved in the U.S. specifically for premature ejaculation, although sertraline and other SSRIs, as well as behavioral therapy, are often used to treat the disorder, with some success.

Recent studies, however, have suggested the SSRIs can alter semen parameters.

To investigate further, Dr. Zahra Sepehrmanesh from Kashan University of Medical Sciences in Kashan, Iran and colleagues compared the effect of sertraline and behavioral therapy on semen parameters in 60 married men with primary premature ejaculation.

Half of the men received sertraline 25 mg daily for one week followed by 50 mg daily for three months. The other half were trained to perform standard behavioral techniques for premature ejaculation (i.e., the squeeze technique and the start-stop technique).

The researchers compared the results of semen analysis between groups before and three months after sertraline or behavioral therapy.

After three months of sertraline, sperm concentration (p<0.001) and percentage of normal morphology were significantly lower (both p<0.001) and the percentage of sperm DNA fragmentation was significantly higher (p=0.002). There was no significant difference in volume of semen and the percent of sperm motility before and after sertraline.

The behavioral therapy group showed no significant before and after differences in these semen parameters.

In comparing the two groups, the researchers found that the decline in sperm concentration (p<0.001) and percentage of normal morphology (p=0.009) in the sertraline group was significantly more than in the behavioral therapy group, as was the increase in percent of DNA fragmentation (p=0.004).

In the journal Urology online now, the authors note that literature reviews have suggested that there is a "higher probability of pregnancy if the maximum proportion of cells revealing evidence of DNA damage (the DNA Fragmentation Index) does not exceed approximately 30%. Although fertility was not directly assessed in this study, these significant changes in the DNA integrity of sperm suggest an adverse fertility effect related to sertraline use."
"In general, when this drug is prescribed, such side effects should also be considered, and administration of these drugs should be cautious especially when the patient is trying to conceive," the authors conclude. "It seems behavioral therapy is a safe method without any side effects on semen analysis parameters," they add.

The authors did not respond to request for comment.

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Urology 2014.

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