New Study Finds No Good Reason To Fear Vasectomy Causes Prostate Cancer

By Ruth Kava — July 18, 2017

Men considering vasectomy for a permanent form of birth control may be leery of the procedure because of fears that it might increase the risk of prostate cancer. However, research seeking to quantify such risks has not been definitive (we wrote about one such study a few years ago). But a new meta-analysis/systematic review just published in JAMA Internal Medicine should go far to lay such fears to rest.

Dr. Bimal Bhindi from the Mayo Clinic in Rochester, Minnesota, and colleagues investigated the putative connection between vasectomy and the risk of prostate cancer by analyzing the results of 53 studies that had examined that association. They included several types of studies — cohort, case-control, and cross-sectional studies. All these types, it must be noted, are observational. The primary outcome they were examining was any diagnosis of prostate cancer — regardless of the grade. Then, they also sought to determine if there were any significant links between vasectomy and high-grade, advanced, and fatal forms of the disease.

Thirty-seven of the studies they reviewed were deemed to have a moderate to high risk of bias. When they analyzed the rest of the studies — those with a low risk of bias — there was a small but significant association found between vasectomy and prostate cancer (about a 5 percent increased risk). These results were from 7 cohort studies (1). Six case-control studies were also analyzed, and there was no significant increase in the risk of prostate cancer (2).

When the investigators examined possible associations between the procedure and risk of advanced, fatal and high-grade prostate cancer, they found no significant results.

They calculated that overall the absolute increased lifetime risk of prostate cancer associated with
vasectomy was on the order of 0.6 percent. Consequently, they concluded, "This review found no association between vasectomy and high-grade, advanced-stage, or fatal prostate cancer."

In addition, concerning the weak association found in their study, they said: "This association is unlikely to be causal and should not preclude the use of vasectomy as a long-term contraceptive option."

Men seeking a permanent contraceptive "fix" should not avoid vasectomy based on a fear of increasing their risk of developing prostate cancer. Of course, individuals should discuss other possible issues with the procedure, and take their own and family histories into account.

1) A cohort study is one in which participants are followed for a specified time period to determine if they develop a condition or disease.

2) A case-control study is one in which people with prostate cancer (cases) are compared to people without the disease (controls). Cases and controls are matched as closely as possible on a variety of characteristics such as age, ethnicity, current diseases, etc.