A Vasectomy Does Not Increase Risk of Prostate Cancer, Mayo Clinic Study Reports

No association between vasectomy and any form of prostate cancer showed up in a review of research and an analysis of factors across studies, Mayo Clinic researchers reported.

This means a man considering a vasectomy as a contraception strategy need not worry about the surgery increasing his risk of developing prostate cancer, the team said.

Previous studies about the association between vasectomy and prostate cancer have yielded conflicting results.

The Mayo Clinic research, “The Association Between Vasectomy and Prostate Cancer: A Systematic Review and Meta-analysis,” was published in the journal JAMA Internal Medicine. The research was done by researchers at the main Mayo Clinic in Rochester, Minnesota, and colleagues.

A number of studies in the late 1980s and beginning of the 1990s suggested an association between vasectomy and the risk of prostate cancer. In recent years, some studies have reported an association and some have not, contributed to the debate over whether there is a link.

Mayo Clinic researchers conducted a comprehensive review of previous studies and did a meta-analysis to determine if a vasectomy is associated with any form of prostate cancer, including high-risk prostate cancer, advanced prostate cancer, and lethal prostate cancer. A meta-analysis covers the combined findings of multiple studies.

The team’s review covered several types of research, including cohort, case-control and cross-sectional studies.

A cohort study covers people who share a common characteristic or experience in a particular period. A case-control study compares two groups whose disease outcomes are different to try to find a reason for the difference. A cross-sectional study looks at information about a population at a point in time.

The Mayo Clinic analysis included 16 cohort, 33 case-control, and four cross-sectional studies. Together, the 53 studies covered almost 14.7 million patients.

“Of these, seven cohort studies (44%), 26 case-control studies (79%), and all four cross-sectional studies were deemed to have a moderate to high risk” of biased findings, the researchers wrote.
When the team focused on studies they considered to have a low risk of bias, they found a week association between vasectomy and prostate cancer in seven cohort studies. They also found an insignificant association between the two elements in six case-control studies.

“The association between vasectomy and prostate cancer was stronger when studies with moderate to high risk of bias were included,” the team wrote.

Overall, the findings supported the notion that there is no association between vasectomy and high-grade, advanced-stage, or fatal prostate cancer.

“Although patients should be appropriately counseled, concerns about the risk of prostate cancer should not preclude clinicians from offering vasectomy to couples seeking long-term contraception,” the study concluded.