Infertility increases a man's risk of prostate cancer

Infertile men have an increased risk of developing high grade prostate cancer, which is more likely to grow and spread quickly. That is the conclusion of a new study published early online in CANCER, a peer-reviewed journal of the American Cancer Society. The study’s results suggest that because infertility may be an identifiable risk factor for prostate cancer, early screening may be warranted in infertile men.

Research focusing on the number of children a man has have pointed to male fertility's potential associated with risk for prostate cancer. However, studies on the topic have generated conflicting results: some have found that men with children had a higher risk than childless men; some have found that men with fewer children had a higher risk than men with more children; still others failed to identify any association between the number of children fathered and a man’s risk for prostate cancer.

Because the number of children a man has may not accurately reflect his ability to cause a pregnancy, Thomas Walsh, MD, MS, of the University of Washington in Seattle and his colleagues designed a more accurate study to evaluate the association between male infertility and prostate cancer. They studied the risk for prostate cancer in a group of 22,562 men evaluated for infertility from 1967 to 1998 in 15 California infertility centers. The incidence of prostate cancer in these men was compared with the incidence in a sample of men in the general population who were of similar ages and from similar geographic locations.

The researchers identified 168 cases of prostate cancer that developed in men who were evaluated for infertility. That number not significantly different from the expected rate (185 cases), suggesting that overall, men evaluated for infertility were not at a higher risk of being diagnosed with any type of prostate cancer compared with men in the general population. However, men who were evaluated and found to be infertile were 2.6 times more likely to be diagnosed with high grade prostate cancer than men who were evaluated but were found not to be infertile.

The authors say if these results are confirmed in other studies, it may be appropriate for infertile men to be considered for early prostate cancer screening, given their elevated risk for aggressive disease. They add that the results should stimulate research on possible common biological pathways underlying infertility and prostate cancer.

Article: “Increased risk of high grade prostate cancer among infertile men.” Thomas J. Walsh, Michael Schembri, Paul J. Turek, June M. Chan, Peter R. Carroll, James F. Smith, Michael L. Eisenberg, Stephen K. Van Den Eeden, and Mary S. Croughan. CANCER; Published Online: March 22, 2010 (DOI: 10.1002/cncr.25075).