INFERTILITY AND CANCER

Infertile men are nearly 3 times more likely to develop testicular cancer than fertile men, results from a US cohort study reveal. Thomas Walsh and colleagues' findings suggest a common etiology for the two conditions.

"Prior population-based work in Denmark, suggesting a link between testis cancer and infertility, led us to investigate the same association in the US," Walsh explains. The lack of a centralized tracking system had made a large study of this issue problematic in the US, until co-investigator Mary Croughan assembled a cohort of 22,562 men. These men—whose records were linked to the California Cancer Registry—and their partners had sought treatment at one of 15 infertility centers in California between 1967 and 1998. Male factor infertility was found to be the problem in about 20% of the couples.

A total of 34 cases of testicular cancer—13 in participants with male factor infertility—occurred at least 1 year after initial infertility evaluation. Regardless of fertility status, men seeking infertility treatment were 1.3 times more likely to develop testicular cancer than age-matched counterparts in the general population. The risk for those with male factor infertility was increased by 2.8 times.

Seminomas accounted for the majority of tumors, with most being pathologically confined to the testicle. An average of 5.6 years elapsed between assessment for infertility and diagnosis of testicular cancer.

"These findings confirmed the association which had been previously described by Danish researchers, and strongly suggests the presence of a common exposure (genetic or environmental) that underlies poor germ-cell health, thus leading to both infertility and cancer," Walsh comments. The investigators speculate that faulty DNA repair is the common factor.

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