

PROSTATE CANCER
COLORECTAL CANCER
INCREASED BY ADT?

Androgen deprivation therapy (ADT), using orchidectomy or gonadotropin-releasing hormone (GnRH) agonists, is a first-line treatment for prostate cancer. A study published in the *Journal of the National Cancer Institute* has raised concerns regarding a putative link between ADT and the development of colorectal cancer.

The authors searched the Surveillance, Epidemiology, and End Results (SEER)–Medicare database and identified 107,859 men who had been diagnosed with prostate cancer between 1993 and 2002, over 55,000 of whom had received GnRH agonists or undergone orchidectomy. They then determined the proportion of these men who had been diagnosed with a secondary colorectal malignancy. The analysis showed that the incidence of colorectal cancer was highest in the orchidectomy group, intermediate in the GnRH agonist group, and lowest for those who had not received ADT.

The increasing risk was related to the duration of GnRH agonist treatment. Patients who had received >25 months of ADT were more likely to develop colorectal malignancy than those treated for <24 months. Even after adjusting for potential confounders such as diabetes, obesity and radiation therapy, there was still an increase in colorectal cancer incidence of 30–40% in men treated with ADT.

These results are supported by studies in animals, which have shown that androgens might protect against the development of colorectal cancer. Thus, the relationship between ADT and colorectal cancer could be causal.

Further clarification of the association is required before this potentially life-saving treatment is abandoned. This study should, however, raise some questions regarding the most appropriate indications for ADT in the prostate cancer population.

Annette Fenner

Original article Gillessen, S. *et al.* Risk of colorectal cancer in men on long-term androgen deprivation therapy for prostate cancer. *J. Natl Cancer Inst.* **1s02**, 1760–1770 (2010)