



AB018. SOH22ABS190. A meta-analysis of rectal cancer risk following prostate radiotherapy

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Background: Radiotherapy offers an attractive treatment option for many men with prostate cancer. However it has been suggested that such ionising radiation may incur a small risk of a radiation induced secondary malignancy. This meta-analysis aims to investigate the risk of rectal cancer following radiation to the prostate.

Methods: PubMed, Web of Science and Embase databases were searched to identify articles assessing the risk of rectal cancer following prostatic radiotherapy. Articles without a valid control group of prostate cancer patients treated without radiotherapy were excluded. A meta-analysis was carried out quantifying the risk of rectal cancer following radiotherapy to the prostate.

Results: A total of 4,757 articles were screened with eight papers meeting the predetermined inclusion criteria. Our analysis of these 796,386 patients showed an increased risk of subsequent rectal cancer in men with prostate cancer treated with radiotherapy in comparison to those treated without radiotherapy (odds ratio: 1.45, 1.07–1.97, P=0.02).

Conclusions: These findings confirm an increased risk of rectal cancer associated with prior radiotherapy

to the prostate. Such a risk has important implications for treatment selection, patient counselling and post-treatment surveillance. Nonetheless, it is imperative that this information is presented in a rational, balanced and comprehensible form that does not disproportionately frighten or deter men with prostate cancer from what might be their most appropriate treatment modality.

Keywords: Pelvic radiotherapy; prostate cancer; radiation induced secondary malignancy; radiotherapy; rectal cancer

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Footnote

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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