Are staging investigations being overused in patients with low and intermediate risk prostate cancer?

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Abstract

INTRODUCTION: According to international best practice guidelines, staging abdominal and pelvic computed tomography (CTAP) and whole body bone scan (WBBS) are not recommended for asymptomatic low and intermediate-risk prostate cancer. Despite this, many patients undergo these investigations. Our aim was to determine the rate and cost of scans being performed for this group of patients.

METHOD: We utilised a database of prostate cancer patients treated by a radiation oncologist specialising in prostate cancer at the Royal Adelaide Hospital between January 2008 and December 2012. Risk criteria were defined according to the D'Amico system. We identified the staging investigations ordered.

RESULTS: Of 236 consecutive eligible patients, 69 (70%) and 85 (86%) of 99 low risk, and 112 (82%) and 126 (92%) of 137 intermediate-risk patients, were found to have had staging CTAP and WBBS, respectively. In fact, only 9.7% of the patients followed the international best practice guidelines and had no staging investigations. None of these scans showed evidence of metastatic disease. The total costs of these investigations for the low and intermediate-risk groups were approximately AUD 75,000 and AUD 116,000, respectively.

CONCLUSION: We found that there is clearly a significant overuse of staging investigations for both these groups while the incidence of metastases identified was very low. This is likely to have a significant impact on the waiting time for scans and lead to substantial waste of resources. It places unnecessary financial burden on the patients and the healthcare system. There are also issues of increased radiation and contrast exposure, and potentially unnecessary further investigations.

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KEYWORDS: CT scan; bone scan; overuse; prostate cancer; staging

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