
The impact of 68Ga-PSMA PET/CT on management intent in prostate cancer: results of an Australian prospective multicenter study.


Abstract

68Ga-PSMA PET/CT scanning has been shown to be more sensitive than conventional imaging techniques in patients with prostate cancer. This prospective Australian multicenter study assessed whether 68Ga-PSMA PET/CT imaging impacts on management intent in patients with primary or recurrent prostate cancer. Methods: Prior to undertaking 68Ga-PSMA PET imaging, referring medical specialists completed a questionnaire detailing relevant demographic and clinical data as well as their proposed management plan. A separate follow up questionnaire was completed after the 68Ga-PSMA PET/CT scan results were available to determine whether their management plan would change. Results: A total of 431 patients with prostate cancer from four Australian centers had pre- and post-68Ga-PSMA management plans completed. Scans were performed for primary staging of intermediate and high risk disease in 25% patients and for restaging/biochemical recurrence in 75% of patients. Overall, 68Ga-PSMA PET/CT scanning led to a change in planned management in 51% of patients. The impact was greater in the group of patients with biochemical failure post definitive surgery and/or radiation treatment (62% change in management intent) compared with patients undergoing primary staging (21% change). Imaging with 68Ga-PSMA PET/CT revealed unsuspected disease in the prostate bed in 27% of patients, locoregional lymph nodes in 39% and distant metastatic disease in 16% of patients. Conclusion: 68Ga-PSMA PET/CT scans detect previously unsuspected disease and may influence planned clinical management in a high proportion of patients with prostate cancer. The impact was greater in patients with biochemical recurrence. This demonstrates the potential clinical value of 68Ga-PSMA PET/CT in management of prostate cancer.

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