

## [<sup>11</sup>C]choline-PET-guided helical tomotherapy and estramustine in a patient with pelvic-recurrent prostate cancer: local control and toxicity profile after 24 months

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### ABSTRACT

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[<sup>11</sup>C]choline positron emission tomography can be useful to detect metastatic disease and to localize isolated lymph node relapse after primary treatment in case of prostate-specific antigen failure. In case of lymph node failure in prostate cancer patients, surgery or radiotherapy can be proposed with a curative intent. Some reports have suggested that radiotherapy could have a role in local control of oligometastatic lymph node disease. This is the first reported case of [<sup>11</sup>C]choline positron emission tomography-guided helical tomotherapy concomitant with estramustine for the treatment of pelvic-recurrent prostate cancer. At 24 months after the end of helical tomotherapy, prostate-specific antigen was undetectable and no late toxicities were recorded. A disease-free survival of 24 months, in the absence of any type of systemic therapy, is uncommon in metastatic prostate cancer. The therapeutic approach of the case report is discussed and a literature review on the issue is presented.

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**Key words:** [<sup>11</sup>C]choline-PET, tomotherapy, prostate, relapse, lymph node.

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