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Contribution of 18F-PSMA PET/CT to the Extension Workup of Intermediate-Risk Prostatic ADK: A Case Report

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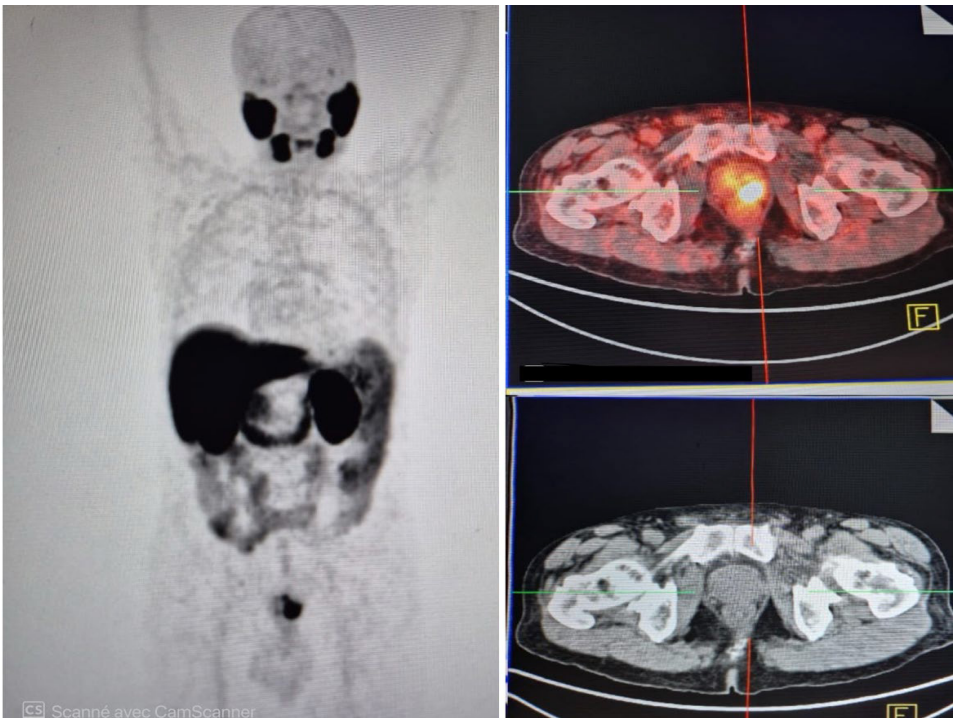

Figure 1: An 85 year old patient with prostatic adenocarcinoma with Gleason score 7(4+3) and PSA level 14 ng/ml. Prostatic MRI was performed showed multiple prostatic foci with negative lymph node extension. The patient was referred to us for 18F-PSMA PET/CT as part of the extension workup. Ninety minutes after injection of 210 Mbq of 18FPSMA for a weight of 66 kg, a whole-body PET scan (from the skull base to the middle of the thigh) was performed. Bilateral uptake in both sides of prostate gland with a predominant localization on the left side, with infiltration of the prostatic capsule and involvement of the vesicles. There was no evidence of lymph node involvement or distant metastases. Despite the established efficacy of PSMA PET/CT in high-risk PCa, its role in guiding management decisions and improving outcomes for men with unfavorable intermediate-risk PCa remains unclear [1]. This finding underscores the potential value of 18F-PSMAPET/CT in improving the accuracy of diagnosing intermediate-risk prostate cancer cases, particularly in predicting tumor aggressiveness and disease progression. 18F-PSMA PET/CT imaging has demonstrated strong diagnostic efficacy for intermediate-risk Prostate Cancer (PCa) cases. This implies that the use of 18F-PSMA PET/CT scans can serve as an objective imaging reference point for clinicians when evaluating patients with intermediate-risk PCa [2]. Preferentially applied for primary staging of PC in patients with GS >7 or PSA levels ≥ 10 ng/ml [3].

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PSMA PET/CT (Prostate-Specific Membrane Antigen Positron Emission Tomography/Computed Tomography) has emerged as a significant tool in both the primary diagnosis and management of Prostate Cancer (PCa) recurrence. Studies have shown that the Gleason score and PSA level was correlated with the intensity of tracer accumulation in the primary tumors of prostate cancer patients on 18F-PSMA PET/CT1. The aim of the study was to evaluate the potential utility of 18F-PSMA PET/CT imaging in diagnosing patients with an intermediate risk of prostate cancer.

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Conflict of Interest

There are no conflicts of interest.

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