

^{68}Ga -PSMA-HBED Uptake on Cervicothoracic (Stellate) Ganglia, a Common Pitfall on PET/CT

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Abstract: ^{68}Ga -PSMA-HBED PET/CT showed promising results in staging and restaging of prostate cancer. However, nonspecific uptake has been reported in the celiac ganglia. In this case series, we showed faint radiotracer uptake on upper thoracic region in the location of cervicothoracic (stellate) ganglia. This ganglion is located anterior to the transverse process of C7 vertebra, inferior to subclavian artery, and superior to the neck of the first rib.

Key Words: ^{68}Ga -PSMA, PET/CT, cervicothoracic, stellate, ganglion, pitfall

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^{68}Ga -PSMA-HBED is still investigational in the United States.

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REFERENCES

1. Demirci E, Sahin OE, Ocak M, et al. Normal distribution pattern and physiological variants of ^{68}Ga -PSMA-11 PET/CT imaging. *Nucl Med Commun.* 2016;37:1169–1179.
2. Rauscher I, Maurer T, Fendler WP, et al. (^{68}Ga -PSMA ligand PET/CT in patients with prostate cancer: how we review and report. *Cancer Imaging.* 2016; 16:14.
3. Derlin T, Schumacher U, Bengel FM. Nonneoplastic neuroma after radical prostatectomy is not a mimicker of lymph node metastases on ^{68}Ga -PSMA Ligand PET/CT. *Clin Nucl Med.* 2016;41:785–786.
4. Henninger M, Maurer T, Hacker C, et al. ^{68}Ga -PSMA PET/MR showing intense PSMA uptake in nodular fasciitis mimicking prostate cancer metastasis. *Clin Nucl Med.* 2016;41:e443–e444.
5. Bhardwaj H, Stephens M, Bhatt M, et al. Prostate-specific membrane antigen PET/CT findings for hepatic hemangioma. *Clin Nucl Med.* 2016;41:968–969.
6. Langsteger W, Fitz F, Rezaee A, et al. ^{68}Ga -PSMA PET/CT with MRI fusion: spinal cord metastasis from prostate cancer. *Eur J Nucl Med Mol Imaging.* 2016. [Epub ahead of print].
7. Krohn T, Verburg FA, Pufe T, et al. [^{68}Ga]PSMA-HBED uptake mimicking lymph node metastasis in coeliac ganglia: an important pitfall in clinical practice. *Eur J Nucl Med Mol Imaging.* 2015;42:210–214.
8. Marcer N, Bergmann M, Klie A, et al. An anatomical investigation of the cervicothoracic ganglion. *Clin Anat.* 2012;25:444–451.