

Incidental Situs Inversus Totalis Detected by Ga-68 DOTA-TATE PET/CT

Ga-68 DOTA-TATE PET/CT ile Saptanan İncidental Situs Inversus Totalis

Sabire Yılmaz Aksoy¹, Sertac Asa², Emre Demirci², Sait Sager², Metin Halac²

¹Department of Nuclear Medicine, Ankara Atatürk Research and Training Hospital, Ankara, Turkey

²Department of Nuclear Medicine, Cerrahpasa Medical Faculty, University of Istanbul, Turkey

Received: 10.21.2013

Accepted: 01.28.2014

Forty-four year-old woman recently underwent an ileocecal resection operation and histopathological examination confirmed the diagnosis of ileal neuroendocrine tumor. Then Gallium-68 DOTA-TATE PET/CT was performed to assess possible metastases. On Ga-68 DOTA-TATE PET/CT images, two foci of increased activity were seen in the right parametrial region which were

consistent with somatostatin receptor type-2 (sstr-2) expressing metastases (Figure 1, left column). PET/CT images also revealed situs inversus totalis (SIT) incidentally. There were right-sided aortic arch (arrow, A), right-sided heart (double arrow, B), left-sided liver (double arrow, C), right-sided spleen (arrow, C) and pancreatic malrotation (double arrow, D).

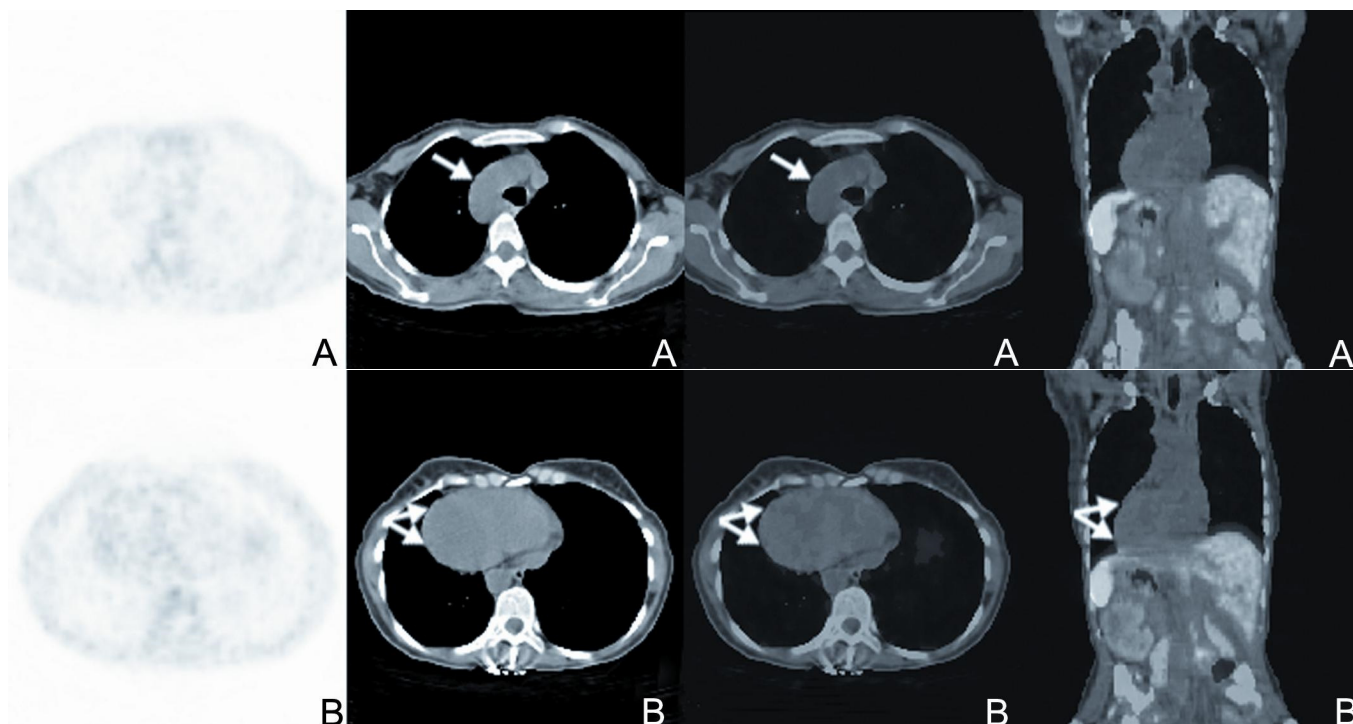


Figure 1. PET/CT images (A) Right-sided aortic arch (arrow, A),(B) right-sided heart (double arrow)

Address for Correspondence / Yazışma Adresi: Sabire Yılmaz Aksoy, MD, Department of Nuclear Medicine, Ankara Atatürk Research and Training Hospital, Ankara, Turkey Phone: +90 5535352290 E-mail: sbr_ylmz@yahoo.com

©Telif Hakkı 2014 Gazi Üniversitesi Tıp Fakültesi - Makale metnine <http://medicaljournal.gazi.edu.tr/> web adresinden ulaşılabilir.

©Copyright 2014 by Gazi University Medical Faculty - Available on-line at web site <http://medicaljournal.gazi.edu.tr/>

doi: <http://dx.doi.org/10.12996/gmj.2014.24>

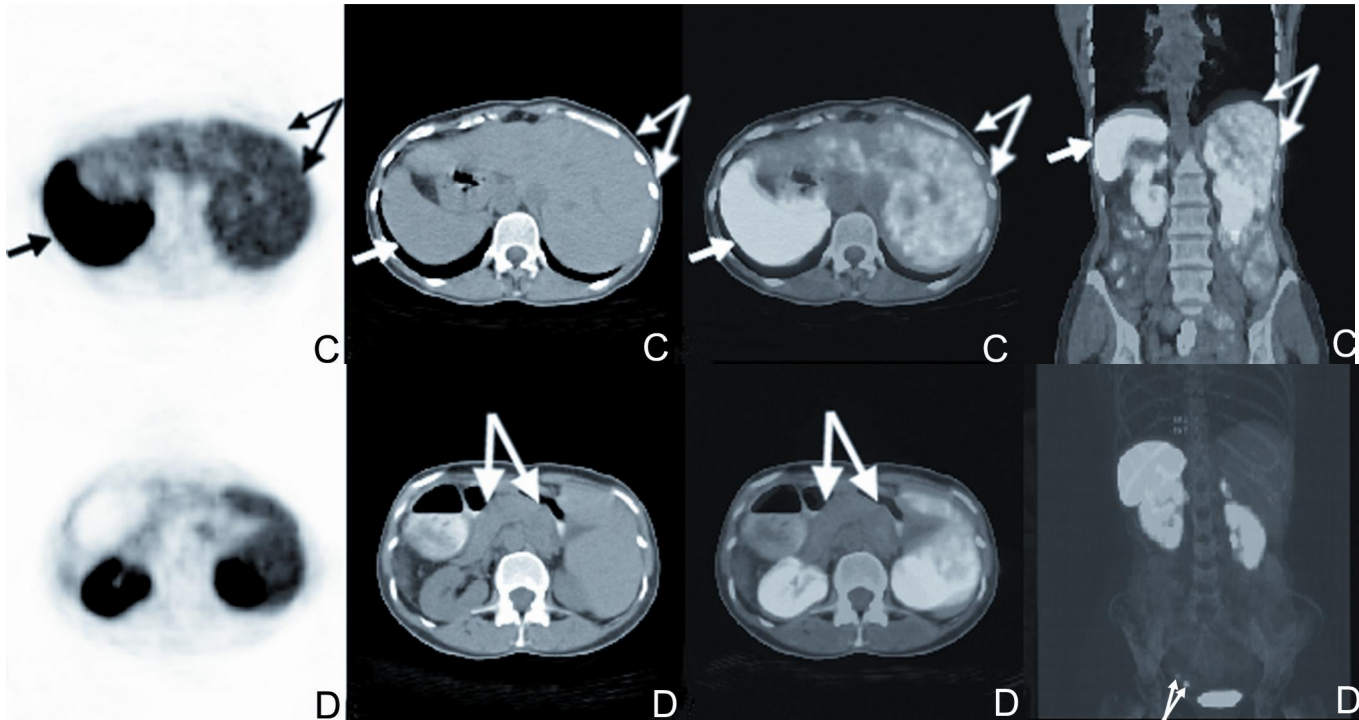


Figure 1. PET/CT images (C) Left-sided liver (double arrow), right-sided spleen (arrow), (D) pancreatic malrotation (double arrow).

Situs inversus, a rare autosomal recessive congenital anomaly, is characterized by transposition of organs to the opposite side of the body. The incidence of situs inversus is 1 in 5000-20.000 and it is seen slightly more common in males than women (1). Situs inversus may be complete, which is defined as situs inversus totalis; or it may be partial, confined to thoracic or abdominal viscera, which is called situs inversus partialis. Patients with SIT are usually asymptomatic and have normal life expectancy (2). As far as we know, this case is the first to report situs inversus totalis demonstrated by Ga-68 DOTA-TATE PET/CT.

Conflict of Interest

No conflict of interest was declared by the authors

REFERENCES

1. Mayo CW, Rice RG. Situs inversus totalis; a statistical review of data on 76 cases with special reference to disease of the biliary tract. Arch Surg 1949; 58: 724-30
2. Douard R, Feldman A, Bargy F, Loric S, Delmas V. Anomalies of lateralization in man: a case of total situs inversus. Surg Radiol Anat 2000; 22: 293-7.