Wandering spleen on a ^{68}Ga -DOTATOC-PET/CT scan

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A 71-year-old woman was referred to our nuclear medicine department for chronic intermittent abdominal pain. An abdominal CT scan showed sclerosing mesenteritis and blood analysis revealed an elevated level of serum chromogranin (1,670 ng/ml, normal range 40–170 ng/ml). To determine whether a neuroendocrine tumour was present, a ^{68}Ga -DOTATOC-PET/CT scan was performed. The maximum intensity projection of the ^{68}Ga -DOTATOC-PET scan (a) showed a well-delineated area of intense uptake in the lower abdomen (b). Note that there is no tracer uptake at the expected level of the spleen (c). This abdominal mass was consistent with splenic tissue on the CT scan (shape, homogeneous contrast enhancement and splenic artery), so a wandering spleen was diagnosed. This abdominal mass could easily have been mistaken on the PET image for a malignant process instead of a normal spleen in an unusual position.

A wandering spleen is a rare condition that is characterized by an increased splenic mobility due to laxity or absence of the normal suspensory ligaments. DOTATOC is a somatostatin analogue that has a high affinity for the somatostatin receptor subtype-2 (SSR 2) which is predominantly expressed by gastrointestinal neuroendocrine tumours. Non-neoplastic human tissue, such as the spleen,

also expresses SSR 2. To the best of our knowledge, a wandering spleen documented by ^{68}Ga -DOTATOC-PET has not previously been reported.

Conflicts of interest None.

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