Incidental Finding of a Left-over Guide-Wire on a Positron Emission Tomography

Kok Hooi Yap · Phong Teck Lee · Mamta Buch ·
Kandadai Seshadri Rammohan

Received: 11 July 2012 / Accepted: 31 August 2012 / Published online: 20 September 2012
© Korean Society of Nuclear Medicine 2012

The Seldinger technique is commonly used to cannulate vessels for radiographical procedures [1]. Loss of a guide-wire into the circulation is a rare and preventable complication [2]. It is often noticed by chance during routine radiographs [2]. However, there is a lack of reported cases of incidental findings of leftover guide-wire on a PET scan. An intravascular foreign body should be retrieved as soon as the diagnosis is made, to prevent complications such as embolisation or vascular damage by fractured wires [1]. Interventional radiology is the method of choice for retrieval [2]. We report a rare case of the coincidental finding of a lost guide-wire on a PET scan.

A 37-year-old man presented with psychotic episodes, thigh weakness, weight gain, increased appetite and leg cramps. He was subsequently diagnosed with Cushing Syndrome secondary to ectopic adrenocorticotrophic secretion from a right lung tumour. He subsequently underwent a staging positron emission tomography (PET) scan (Fig. 1a). The lung tumour had no uptake on PET but had increased activity uptake on octeotride scanning (Fig. 1b, marked in red). These appearances were suggestive of with carcinoid tumour. The PET scan also revealed an incidental finding of a leftover guide-wire used during peripheral inserted central catheter (PICC) recently (Fig. 1a, arrows). The wire extended from right atrium

K. H. Yap (✉) · M. Buch · K. S. Rammohan
Wythenshawe Hospital,
Manchester M23 9LT, UK
e-mail: kokhooi84@hotmail.com

P. T. Lee
Western Infirmary Glasgow,
Dumbarton Road,
Glasgow G11 6NT, UK

Fig. 1 **a** PET shows the guide-wire (*arrows*) and high uptake of adrenal glands (*A*). **b** Lung tumour with increased activity uptake on octeotide scanning (marked in *red*), suggesting carcinoid tumour

to inferior vena cava. It also showed a high uptake in the adrenal glands, indicating hyperplasia, which was most likely due to adrenocorticotrophic hormone stimulation (Fig. 1a, labelled *A*). He underwent a percutaneous wire retrieval via the right femoral vein in a cardiac catheterisation laboratory and was transferred to a thoracic surgical unit for lung tumour resection.

Acknowledgments We are grateful to all staffs that provided their care in the management of this patient especially the cardiology team in Wythenshawe Hospital, Manchester.

Conflicts of Interest None.

References

1. Pérez-Díez D, Salgado-Fernández J, Vázquez-González N, Calviño-Santos R, Vázquez-Rodríguez JM, Aldama-López G, et al. Images in cardiovascular medicine. *Circulation*. 2007;115:3039.
2. Schummer W, Schummer C, Gaser E, Bartunek R. Loss of the guide wire: mishap or blunder? *Br J Anaesth*. 2002;88:144–6.