Intractable hiccups causing avid FDG uptake in the muscles of respiration

Yi-Tung T. Huang · Sally F. Barrington ·
Sheila C. Rankin · Paul A. Thomas

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It has been previously reported in the literature that intractable hiccups (singultus) may indicate a serious underlying pathology [1]. In particular, there have been well-documented cases that intractable hiccups are associated with cerebral toxoplasmosis in human immunodeficiency virus (HIV) patients [2–4]. We present a case using F-18-fluorodeoxyglucose (FDG) positron emission tomography (PET) that demonstrates the effect of intractable hiccups on FDG uptake in a PET scan.

A 30-year-old man with HIV was referred for a FDG-PET/CT scan to further investigate an enhancing lesion in the right frontal lobe found with magnetic resonance imaging. The patient was suffering from intractable hiccups during the FDG uptake period. The PET/CT showed an area of hypometabolism in the right frontal lobe surrounded by a rim of low-grade increased uptake in keeping with toxoplasmosis (arrow, A). In addition, as a result of the intractable hiccups, there was avid FDG accumulation within the muscles of respiration (intercostal and diaphragmatic muscles), and the accessory muscles of respiration in the low neck. This is shown in both axial (B) and coronal

Y. T. Huang · P. A. Thomas
Department of Nuclear Medicine and Queensland PET Service,
Royal Brisbane and Women's Hospital,
Brisbane, Australia

S. F. Barrington · S. C. Rankin
PET Imaging Centre at St Thomas', Division of Imaging
Sciences, Kings College London and Guy's and St Thomas'
NHS Foundation Trust,
London, UK

Y. T. Huang (✉)
Royal Brisbane and Women's Hospital,
Level 3 Ned Hanlon Building,
Herston QLD 4029, Australia
e-mail: yi-tung_huang@health.qld.gov.au

(C) planes (left panel shows CT scan, middle panel FDG-PET, and right panel fused PET and CT).

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