

- to-brain transfer constants from multiple time uptake data. Generalisations. *J Cereb Blood Flow Metab* 1985; 5:584-90.
- 25 Brooks DJ, Salmon EP, Mathias CJ, *et al.* The relationship between locomotor disability, autonomic dysfunction, and the integrity of the striatal dopaminergic system in patients with multiple system atrophy, pure autonomic failure and Parkinson's disease, studied with PET. *Brain* 1990;113:1539-52.
 - 26 De Volder AG, Francart J, Laterre C, *et al.* Decreased glucose utilization in the striatum and frontal lobe in probable striatonigral degeneration. *Ann Neurol* 1989;26:239-47.
 - 27 Clark CM, Ammann W, Martin WRW, Ty P, Hayden MR. The FDG/PET methodology for early detection of disease onset: a statistical model. *J Cereb Blood Flow Metab* 1991;11:(suppl 1):A96-102.
 - 28 Sawle GV, Bench CJ, Cunningham VJ, *et al.* The identification of pre-clinical Parkinson's disease: discriminant function analysis of PET 6-L[¹⁸F]fluorodopa data. *J Cereb Blood Flow Metab* 1991;11(suppl 2):S811.
 - 29 Fearnley JM, Lees AJ. Ageing and Parkinson's disease: substantia nigra regional selectivity. *Brain* 1991;114:2283-301.
 - 30 Bernheimer H, Birkmayer W, Hornykiewicz O, Jellinger K, Seitelberg F. Brain dopamine and the syndromes of Parkinson and Huntington. *J Neurol Sci* 1973;20:415-55.
 - 31 Jellinger K, Riederer P, Tomonaga M. Progressive supranuclear palsy: Clinico-pathological and biochemical studies. *J Neurol Transm* 1980;16 (suppl):129-36.
 - 32 Ruberg M, Javoy-Agid F, Hirsch E, *et al.* Dopaminergic and cholinergic lesions in progressive supranuclear palsy. *Ann Neurol* 1985;18:523-9.
 - 33 Spokes EGS, Bannister R, Oppenheimer DR. Multiple system atrophy with autonomic failure. Clinical, histological, and neurochemical observations on four cases. *J Neurol Sci* 1979;43:59-82.

Neurology in literature

Hemifacial spasm

Authors of neurological texts seldom match the felicity for expression demonstrated by writers of fiction. Though none of the extracts describing probable hemifacial spasm in this issue antedate the neurological literature on the subject, they impress (and, in one case, amuse) by the accuracy of their observation and their use of language.

Nikolai Gogol, 1852, Dead souls

The public prosecutor with his very black, thick eyebrows and with his left eye that kept winking slightly, ... winking with his left eye and flicking his beard with his handkerchief to brush the snuff from it.

Fedor Dostoevsky, 1866, Crime and punishment

It would have seemed good natured were it not for the expression of the eyes, which had a watery, glassy gleam under the lids with nearly white eyelashes, which twitched almost as though he were continually winking.

Again he suddenly seemed to wink at him with his left eye, and laugh noiselessly—exactly as before.

Sherwood Anderson, 1919, Winesburg Ohio

There was something strange about his eyes. The lid of the left eye twitched; it fell down and snapped up; it was exactly as though the lid of the eye were a window shade and someone stood inside the doctor's head playing with the cord.

Evelyn Waugh, 1932, Black mischief

There was once a man who got run in for winking at girls in the street. So he said it was a permanent affliction and he winked all through his trial and got off,

but the sad thing is that now he can't stop and he's been winking ever since.

Thomas Mann, 1947, Dr Faustus

One side of his cheek was drawn up in a sort of tic, the corner of the mouth as well, and the eye winked in sympathy.

Graham Greene, 1948, The heart of the matter

The French officer returned his salute—a drained-out figure with a twitch in the left eyelid.

George Orwell, 1949, 1984

They were a few metres apart when the left side of the man's face was suddenly contorted by a sort of spasm. It happened again just as they were passing one another. It was only a twitch, a quiver, rapid as the clicking of a camera shutter, but obviously habitual.

Joseph Heller, 1979, Good as gold

Since his dental practice had ceased growing, Irv had developed a tic in his right cheek that often gave him the appearance of smiling inexplicably.

John Fowles, 1985, A Maggot

Most unexpectedly his right eye flickers, in the ghost of a wink...and again his right eye flickers, almost as if it is a tic, outside his control...and once again she sees that tic in his right eye...and then again there comes that minute spasm of his eyelid...she receives one last tic of his right eyelid; and then he is gone.

G D PERKIN
Regional Neurosciences Centre,
Charing Cross Hospital,
London W6 8RF, UK.