Phosphocreatine (PCr), an important energy source in the brain, was studied using SPECT (single-photon emission computed tomography). Daily counts inorganic phosphate (Pi) were measured, and changes were correlated with clinical deterioration.

**Neurosyphilis presenting with dissociative symptoms**

A 62-year-old man was admitted as an emergency to a medical ward with a five-day history of expressive dysphasia. The patient was acutely ill and his wife also was in hospital. Neurosyphilis was suspected based on the presentation and cerebrovascular disease.

Despite these SPECT and spectroscopy changes, there was no evidence of vasospasm. Daily transcranial Doppler studies (using a Scimed PC Dop machine) demonstrated middle cerebral artery velocities within the normal range (right mean velocity (SD) 43 (4.3) cm/s, left 35 (5.6)). Angiography, performed for clinical evaluation on day 7, showed a middle cerebral artery aneurysm, and confirmed the absence of vasospasm.

The patient was subsequently discharged home after being on day 11. Three days later, he re-bleed, developing hemorrhage into the left hemispheric area. Postoperative recovery was further complicated by vasospasm detected with transcranial Doppler. The patient was admitted to the intensive care unit where he was intubated and ventilated. Postoperative recovery was further complicated by vasospasm detected with transcranial Doppler. The patient was admitted to the intensive care unit where he was intubated and ventilated.

This case illustrates the importance of early detection and treatment of neurosyphilis. Early intervention can significantly improve outcomes and reduce the risk of neurological complications.

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ferrred to an organic psychiatric unit for fur-
ther investigation. The dysphasia resolved, but the perseverative
expression of his speech and actions, confabulating fre-
quently, and his behaviour was socially dis-
hibited. He began to express grandiose ideas. Neuropsychological assessment
showed pronounced frontal lobe impair-
ment.
At this point, syphilitic serology showed
treponemal disease research laboratory
test (VDRL) positive (1:10), TPAT positive
(1:256), and fluorescent treponemal anti-
body (FTA) positive + + + +. Further
investigation of CSF showed VDRL positive
(1:4), TPAT positive (1:1024), and FTA positive
+ + + +. The Euglenitic focusing pattern to
detect oligoclonal IgG was negative
for serum and positive for CSF. A dia-
nosis of neurosyphilis was made, and
oral doxycycline (100 mg thrice daily) was com-
menced.
His wife did not undergo a postmortem.
In view of the patient’s diagnosis, reexami-
nation of his wife’s stored serum was carried
out, but he repeated test for syphilis in serum was
negative. As part of the investigation of her
illness, CSF had been examined, showing
normal cells and proteins. Tests for syphilis
were not performed on CSF.
The patient’s primary infection is un-
known. He had been happily mar-
rried for 40 years. Of possible relevance in his
employment history was the fact that he had
served in the army for two years in Germany as
a transport driver.
This case is remarkable for the apparent
coincidence of two unusual causes of
dementia in a married couple. There is a possi-
bility that the patient’s wife might also have
had neurosyphilis; this diagnosis has been
reported as presenting as Creutzfeldt-
Jakob disease.1 Her negative serum VDRL
and normal CSF cells and protein make this
unlikely, but in the absence of postmortem
confirmation of the diagnosis or antemortem
CSF examination it is not possible to be
certain. Examination of CSF to exclude
neurosyphilis should always be carried out in
patients with possible Creutzfeldt-Jakob disease.
This case is also a reminder that hysterical
dissociation is a very unsafe diagnosis to
make in older adults. Even genuinely disso-
ciative symptoms in elderly patients are usu-
ally indicative of an underlying organic
cerebral disorder, and this should always be
investigated. The initial diagnosis of a disso-
ciative disorder in this patient was based on
the circumstances surrounding the onset,
the absence of focal neurological signs, and
the presentation with symptoms which mim-
icked his wife’s. The cognitive impairment
only became apparent as the dysphasia and
agitation resolved.
The dramatic onset of the patient’s symp-
toms in the context of his wife’s terminal ill-
ness is interesting. It was commonly
reported in the pre-antibiotic literature that
the onset of general paralysis of the insane
could be precipitated by “mental shocks”
such as bereavement and illness in the
family,1 but this clinical finding has never
been systematically studied. The acute presenta-
tion of people with cognitive deficits is not
uncommon when a spouse falls ill or dies.
This is because of the sudden depres-
ture of the carer discloses the impairment,
but sometimes the stress of the event causes
a significant decompensation, as seems to have occurred in this case.
Another lesson to be drawn from this patient is that neurosyphilis is not a histori-
cal curiosity, but something the clinician needs to keep in mind particularly when
investigating elderly patients. There is evi-
dence that neurosyphilis is becoming clini-
cally less typical; this serological investiga-
tion is all the more important if the diagno-
sis is not to be missed. Routine
screening of all elderly patients is currently
out of favour, although still recommended
for those with an organic illness.2 This
patient, together with others in whose
neurosyphilis has presented as a functional dis-
order, does raise the question of whether
these patients should be screened also, par-
ticularly those with an atypical illness that is
unresponsive to treatment.3

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1 Larsen EB, Schultz U. Severe consequences of delayed treatment of neuro-
2 Lindsey J. Neurotic disorders in the elderly. International Review of Psychiatry 1993;5:
461-7.
3 Sankey WHO. Lectures on mental disease. London; Lewis; 1884.
4 Micklle WF. General paralysis of the insane. London; Lewis; 1884.
5 Roberts MC, Emsley RA. Psychiatric manifes-
332-33.
6 Swakumar K, Okocha CI. Neurosyphilis and schizo-affective disorder. The Lancet 1992;1:
251-4.
7 Siruta P, Evtazar J, Spivak B. Neurosyphilis presenting as psychiatric disorders. Br J
8 Cleare AJ, Jacoby R, Tovey SJ, Bergmann K.
Syphilis, neither dead nor buried—A survey of psychogeriatric inpatients. International
9 O’Neil T, McCaffrey B. Further support from an
Irish psychiatric hospital for lack of rou-
tine serological tests for syphilis. Irish Journal of Psychological Medicine 1989;16:
412.

Alternating paroxysmal dystonia and
hemiplegia in childhood as a symptom
of basal ganglia disease

We report a 13 year old girl with an unusual
clinical presentation of long-lasting pro-
gressive cerebellar and pyramidal disorder,
episodes of alternating paroxysmal dystonia
lasting up to an hour, and hemiparesis of the
involved side or sides, reminiscent of
alternating hemiplegia of childhood. Magnetic
resonance imaging showed hypo-
tensity of the basal ganglia, particularly
the globus pallidus, similar to that seen in
Hallevosse and Saarma found in raising the pos-
sibility that this may represent an atypical
form of the condition.
The patient, now aged 13, was born at
term after a normal pregnancy and delivery,
and non-consanguineous parents; there were
no perinatal problems. At two months of
age she was noted to be hypotonic. She had
delayed motor milestones, sitting at nine
months and walking at 22 months, and was
told to be "always clumsy". Tremor and ataxia
were noted at two years and have been
slowly progressive, particularly since
the age of eight: by 12 years she needed to
use a frame. Examination showed her to
have pyramidal signs in all four limbs as well
as considerable titubation and cerebel-
lar signs.
At the age of 10 she developed episodes
of painful dystonic posturing of the arm and leg,
usually on the right side, but occasionally
on the left, associated with hemiparesis. These
initially occurred during sleep and were
precended by a cry. They were often associ-
ated with a contralateral headache. They lasted
15 to 45 seconds and ended abruptly, and she could have several in a
month, sometimes more than one a day.
They were at first helped by carbamazepine
but later recurred, during waking as well as in
sleep. After withdrawal of the carba-
mazepine she developed distressing bilateral
attacks that were also associated with drool-
ing and difficulty in breathing: these settled
after reintroduction of the medication. She
did not respond to benzodiazepines.
Flumaze
innizine likewise produced no benefit.

Blood tests including lactate, ammonia,
thyroid function, cholesterol, triglycerides,
carboamino acids, complement, renal func-
tion tests, calcium, magnesium, arylsulphatase A, hexosaminidase, plasma
very long chain fatty acids; renal function
tests and urinary oligoaccharanides were
normal. Examination of the CSF, including
 assay for lactate and amino acids, was nor-
mal, and there were no oligoclonal bands.
Messeas and rubella antibodies were not
detected. An EEG was normal, EEG was
mainly-beta, asymmetrical and evoked responses were both delayed. Nerve
conduction studies and nerve and muscle
biopsies were normal. Cytochrome oxidase
and pyruvate dehydrogenase activity were
normal. Repeated CT was unremarkable,
but MRI showed notable symmetric low
intensities in the basal ganglia, particularly
in the globus pallidus, but also the putamen,
red nucleus, substantia nigra, and thalamic
pulvinar. There were also changes in the white matter signals in the
region of the U fibres (figure).

Our patient presents an unusual clinical
picture, in which the diagnosis is that of
a paroxysmal alternating or sometimes bilat-
eral dystonia associated with weakness
supernovenced on the background of a progres-
sive neurological disorder involving cerebel-
ar, pyramidal, and extrapyramidal systems,
the aetiology of which remains unclear
despite extensive investigation. At their
onset, the possibility that these episodes
represented a seizure disorder was consid-
ered, but this has not been confirmed either
by the clinical course or by EEG video-
monitoring.

The attacks were not precipitated by
movement, nor was there any family his-
tory. They thus differed from the fami-
ary paroxysmal choreoathetosis described
by Mount and Reback4 and from paroxysmal
kinetic stereotypiosis, which are familial
or sporadic. In these conditions, periods of
paroxysmal alternating and bilateral attacks
have been described. In paroxysmal kinesigenic
choreoathetosis the attacks also tend to be
much shorter than those in our patient,
unlike familial paroxysmal choreoathetosis,
in which they may last several hours. The
occurrence of hemiparesis in association