examination in December 1986 when he was found to be HIV seropositive and affected by persistent generalised lymphadenopathy, also documented by a lymphnode biopsy. In May 1987 he developed Hodgkin’s disease, mixed cellularity subtype, stage IVB. He was treated with combination chemotherapy for six cycles, until September 1987, obtaining a partial remission. In October 1987 the patient was hospitalised because of pyrexia, gait abnormalities, weight loss, headache and wide oral candidiasis. A broad spectrum antibacterial and anti-mycotic drug treatment was begun. Lumber CSF was normal. A neurological examination excluded focal deficits, but slowness of thought and meningeal signs were disclosed. The brain CT scan was normal.

On 17 November 1987, AZT therapy was begun at a dosage of 200 mg orally every 4 hours. At that time the white blood cell count was 1300/mm$^3$ (91% polymorphs, 9% lymphocytes), haemoglobin was 8.6 g/dl, platelets were 23,000/mm$^3$, total number T4 cells were 126/mm$^3$. After the first day of AZT therapy, the patient complained of myalgia of the limbs and 5 days later he had focal seizures and respiratory arrest; within these episodes we observed a progressive neurological deterioration with space-temporal disorientation and speech difficulties. The brain CT scan was negative. Despite intravenous diazepam and phenobarbital, focal seizures and respiratory arrest became more frequent and protracted. For this reason on the 21 November the patient ceased to receive AZT therapy and on the 23 November he died.

There were no infectious illnesses, no fluid and electrolyte disturbances or metabolic abnormalities nor any neoplastic lesions affecting the central nervous system, in order to explain the patient’s death.

Necropsy, performed after 16 hours, disclosed massive lymphomatous involvement of the retroperitoneal nodes, liver and spleen. The central nervous system did not show any lymphomatous nor infectious involvement but only a nonspecific intra-cerebellar haemorrhagic lesion was described; this was, however, not explanatory of the clinical symptomatology. The toxic action of AZT on the nervous tissue could have been induced by either a direct or indirect mechanism, rendering the pre-existing neurological lesions more severe. In our patient both mechanisms could have taken place and the neurological abnormalities present prior to AZT therapy evolved rapidly during the first days of treatment towards a progressive neurological deterioration with focal seizures, respiratory arrest and death.

**Two spina bifida defects in the same child**

Sir: Congenital malformations of the central nervous system have been shown not to be uncommon in black people and reports from Nigeria show that hydrocephalus, anencephaly and myelomeningocele are the common anomalies seen. However, it is very rare for the same patient to have more than one defect of the spine; there are reports in the literature of such cases and the existence of lesions at three separate levels are extremely rare. The first case of a double spina bifida lesion in the same patient in Nigeria is presented in this report.

A 3 month old male child was admitted to hospital with a history that two swellings in the midline of the back had been noticed at birth. He was the third child of his mother. Pregnancy was uneventful throughout and was supervised at a private clinic in Bauchi State where she lived. Delivery was vaginal at term but was at home. The child cried spontaneously and passed meconium after birth.

Examination on 26 January 1988 showed a well nourished baby boy with a head circumference of 39 cm who weighed 5.1 kg. He was breathing spontaneously but had an intermittent stridor which had developed 18 days after birth. The anterior fontanelle was patent, flat and not tense. Two midline cystic

**Reference**


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swellings were noted in the thoracolumbar
and lumbosacral regions. The upper swelling
was covered by scar tissue and measured
5 cm x 3 cm. The lower swelling was
covered by normal skin and measured 8 cm
by 5 cm (fig). A sacral dermal sinus was seen
below the lower swelling. Movements in both
lower limbs were spontaneous but weak and
the right lower limb moved better than the
left. Anal sphincter tone was good. No other
abnormality was noted. Radiographs of the
chest and skull showed no abnormality.
Thoracolumbar spine radiographs showed
involvement of thoracic vertebrae T₅-T₁₁ and
Lₙ-S₁ in the lumbosacral defects.
On 5 February 1988 at operation a rup-
tured thoracic myelomeningocele and a
lumbosacral lipomyelomeningocele were
found and repaired. The dermal sinus was not
continuous with the spinal canal. 3-5 gm
of fat was excised from the lipomyelomen-
ingocele. The postoperative period was com-
plicated by cerebrospinal fluid (CSF) leakage
down the distal lesion which later broke down
and required repeated aspiration and second-
dary wound closure. Movements in both
lower limbs have not improved.
Very few cases of more than one lesion
have been observed in the same patient.
Tryfonas,⁴ reported three spinal bifeida
lesions in the same patient. The patient
presented in this report had a thoracic
myelomeningocele and lumbosacral
lipomyelomeningocele (fig). A sacral dermal
sinus was also present but it did not extend
into the conus medularis. Johnson⁵ in 1857
was the first to describe a lipomyelomen-
ingocele as a subcutaneous lipoma usually in
the lumbosacral region. The lipoma usually
passes through a defect in the muscles,
vertebrae and dura into a low-lying spinal
cord contiguous with the fat, which may be
large or finger like. According to Schut,⁶ who
reported an incidence of 25% lipomyelomen-
ingocele to myelomeningocele, lipomyelomen-
ingocele far outstrip other dysraphic anomalies like diastematomyelia,
limbal sinus and thickened filum terminale.

Patients born with a lipomyelomen-
ingocele are typically neurologically intact and
present with a developing neurological
deficit with increasing age. Many have a
significant neurological deficit, by the time
they attain the age of 4 years.⁷ Surgical repair
not only aims at rectifying the cosmetic
appearance but also at preventing
neurological deterioration. The two spina
bifida defects seen in this patient could each
account for the decreased muscle power in
both lower limbs. The good anal sphincteric
tone without a patent anus was noted. There
was no talipes equinovarus deformity
of the foot. The patient did not develop
hydrocephalus post operatively and has not
shown neurological deterioration during
outpatient follow-up.

**References**


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**Meningioma—an unrecognised complication of fibrous dysplasia of the skull?**

Sir: Fibrous dysplasia is a congenital, non-
familial, benign anomaly of bone development occurring in single or several bones, characterised by the replacement of normal bone by fibro-osseous tissue,¹ with normal serum calcium, phosphate and alkaline phosphatase levels. The condition may be associated with skin pigmentation and endocrine abnormalities (Albright’s syndrome).² Approximately one-third of patients with fibrous dysplasia have involvement of the cranial or facial bones,³ complications of which include facial pain, headache and cranial nerve palsies due to bony compression, optic nerve damage being the most serious.

Although rare, malignant change occurring within dysplastic bone is well recognised. Various types of sarcoma have been reported including osteosarcoma, fibrosarcoma, chondrosarcoma and neurosarcoma.⁴ The present case report describes the development of a meningioma in association with fibrous dysplasia of the skull.

A 50 year old right handed Pakistani railway storeman was first seen in 1965 at the age of 28 years, with a long history of skull swelling and recent onset of double vision looking to the right. The diagnosis of fibrous dysplasia was confirmed on skull radiographs. In 1966 he had two operations, in the first excess bone was removed from the region of the left orbit with some improvement in his visual symptoms, but when these recurred a large quantity of dysplastic bone was removed from the skull vault, leaving a full thickness bone defect, which was later filled with an acrylic prosthesis. He did not receive radiotherapy and appears to have been lost to follow up.

The patient presented again in 1987 complaining that for the past 2 years there had been skull enlargement in the region of the left forehead and vertex, as well as episodes of visual blurring in the left eye, but no change in the longstanding diplopia. On examination there was obvious left frontal bossing. Although the visual acuities were normal, the visual fields revealed bilateral constriction and the fundi showed early papilloedema. The left eye movements were limited with restricted elevation and abduction. There were no other abnormal findings.

Routine biochemical indices were unremarkable, in particular serum calcium, phosphate and alkaline phosphatase levels were normal. A skull radiograph showed a large bone defect from his previous craniectomy. The frontal bones were thickened, particularly on the left, the left anterior clinoid was expanded and sclerotic with the appearances of fibrous dysplasia. CT of the head showed extensive fibrous dysplasia involving the frontal, parietal and sphen-
Two spina bifida defects in the same child.

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