the purpose of our programme. Our attitude reflected the health workers' classic, clumsy mistake: "You need this so I will give it to you."

The villagers' response reflected their own pastoral logic. "We don't often see the diseases you talk about, so we don't see why we need special injections to prevent them. Last time you gave injections our children got sore legs and fevers and, although you warned us this would happen, it didn't make it any less painful for the children. Moreover, it was harvest time and many of us had to stay in from the fields to care for the children when we could ill afford the time." Game and first set to the villagers.

Sensitising the people

The missing ingredients in the health workers were the gift of sensitivity and the process of sensitisation. We had been insensitive to the priorities of the villagers' lives and to the way in which they viewed our health programme. More importantly, we had omitted the prior step of sensitisation. This, the definitive art of community health, means informing and alerting a person and community about its real needs and how they can be met. A person sensitised on the subject of immunisation will say: "I understand the need for them, I want my children to have them, and I will bring them for you to administer the injections." In this way the request comes

from the people, cooperation is assured, everyone is satisfied, and coverage is complete.

As a result of failure to sensitise the people many immunisation teams are squeezed between seniors demanding returns and children reluctant to bare their bottoms. It is no wonder that the numbers of immunisations recorded often bears little relation to the numbers actually given.

Priorities of Health for All

Such is the double dilemma of primary health care: on the one hand wrongly sensitised villagers falling prey to the therapeutic imperative of the salesman and on the other hand those same villagers, unsensitised to their real needs and suspicious of the technically correct but insensitive advances of the health worker.

A sinister twist in the health care process easily follows. The unscrupulous practitioner exchanges service for exploitation, maintaining a vested interest in a pool of ready disease. The illiterate patient, confused and gullible, falls easy prey to capricious treatments. It is only by arming people with the power of understanding that they can be protected from the consequences of a sometimes corrupt and insensitive health care system. Whether in the developing world or in the West, correcting this betrayal of trust is one of Health for All's most daunting priorities.

Lesson of the Week

Backache and the Guillain-Barré syndrome: a diagnostic problem

J E CLAGUE, R R MACMILLAN

Backache is one of the most common presenting symptoms in general practice and is estimated to cause the loss of 33 million working days a year in Britain.¹ By contrast, Guillain-Barré syndrome is rare, with an incidence of about $1.7/10^5$.² The mortality associated with backache is low, while that from Guillain-Barré syndrome may reach 20%, being greatest if ventilatory support is needed.³

The diagnosis of Guillain-Barré syndrome rests on finding a symmetrical polyneuropathy associated with a raised protein concentration in the cerebrospinal fluid.^{4,5} Muscle pain is a recognised feature and may be severe; importantly, it may precede the onset of neurological symptoms and signs. We describe two patients whose presenting complaint was back pain and who were initially referred to the orthopaedic department. Later they required the monitoring and support that are provided by an intensive care unit.

Guillain-Barré syndrome should be considered in the differential diagnosis of backache

Case 1

A 61 year old man requested a visit from his general practitioner complaining of severe lumbar and interscapular pain. He was admitted to hospital after a domiciliary consultation by an orthopaedic surgeon.

The patient complained of sudden onset of back pain three days before his admission and, though he did not admit to any weakness of his legs, said that the pain prevented him from moving his legs fully. Initial examination showed no neurological deficit other than a loss of vibration sense at ankle level bilaterally.

Two days after admission he complained of difficulty in breathing and had difficulty swallowing. He developed paraesthesias in both legs and was incontinent of urine. A medical opinion was sought and the patient was found to have developed generalised weakness in all limbs, grade 4 in all muscle groups. There was no detectable loss of sensation to pinprick or soft touch. Reflexes were absent and the loss of vibration sense had extended to his arms. The provisional diagnosis was Guillain-Barré syndrome, which was supported by a cerebrospinal fluid protein concentration of 0.8 g/l. He was transferred to our intensive care unit for further monitoring of his ventilatory reserve. Twenty four hours after transfer his forced vital capacity was 1.0 litre and he was therefore ventilated. He required 22 days of

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ventilatory support, which was complicated by a coliform pneumonia. He was discharged from hospital 25 days later with a walking aid. After a further two months he was able to walk with just the aid of a stick.

Case 2

A 29 year old man visited his general practitioner complaining of backache for 10 days, which had begun the day after heavy lifting at work. There was no previous history of back injury. Bed rest for three days at home had given no relief and he complained of paraesthesias in his feet. He was referred as an emergency to the orthopaedic surgeon on call and was found to have tenderness over his lumbar spine. No neurological deficit was detected. Bed rest was continued with the addition of skin traction. Over the next few days his paraesthesias worsened and the back pain persisted. Full neurological examination was not performed because of the skin traction, but no deficit in sensation to pinprick or soft touch was detected. He complained of progressive weakness and developed paraesthesias in his hands. A myelogram was arranged but before it could be performed palsy of the seventh cranial nerve developed.

The patient was reassessed in the light of these features and was found to have generalised weakness in all limbs, areflexia, and subjective sensory changes in his arms and legs. A provisional diagnosis of Guillain-Barré syndrome was supported by a protein concentration of 3 g/l in the cerebrospinal fluid. He was transferred to the intensive care unit and his vital capacity monitored. This was initially 3.2 litres and improved over 72 hours to 4.0 litres. At no time was he in any respiratory distress. His power improved over the same period and he was transferred to a medical ward and discharged 15 days later when he could climb stairs unaided.

Discussion

Back pain as a presenting symptom is usually referred to the orthopaedic department. The presence of neurological symptoms or signs correctly leads to the fear that a compressive lesion is the cause and that the patient may require surgical treatment. The neurological signs associated with a compressive lesion are radicular in

distribution or an upper motor neurone defect may be present, depending on its site and size. Such lesions do not progress in the pattern that typifies the Guillain-Barré syndrome.

Guillain-Barré syndrome may be ushered in by lumbar and interscapular pain, according to one important textbook.⁶ Backache has previously been reported preceding the onset of neurological symptoms and signs by several days.⁷ Sensory disturbances associated with the syndrome may cause confusion. Characteristically, objective findings do not correlate with the patient's symptoms. Paraesthesias are commonly of a glove and stocking type, though they may rarely be radicular in distribution.

The danger of misdiagnosis is considerable. Guillain-Barré syndrome may progress rapidly to respiratory arrest. Ventilatory failure may develop insidiously in the patient with impaired cough power and consequent chest infection. Autonomic neuropathy may cause arrhythmias or cardiac arrest. Recognising the syndrome necessitates frequent and accurate monitoring of vital capacity until it is clear that recovery is taking place. These observations are best performed in an intensive care unit. The diagnosis of Guillain-Barré syndrome should always be considered when back pain and neurological signs are presented. Regular reassessment of such patients is important to avoid unnecessary morbidity.

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Epidemiology

Report from the PHLS Communicable Disease Surveillance Centre

Five cases of "airport malaria" were reported from Belgium at the end of June; Reye's syndrome received much publicity during the month because of the possible association between the syndrome and the use of aspirin; and cholera notifications increased in 1985 and the first half of 1986—but most of the infections were due to non-cholera vibrios and not true cholera. There were 27 further reports of the acquired immune deficiency syndrome.

Airport malaria

Five cases of malaria due to *Plasmodium falciparum* were reported at the end of June in men handling cargo from Zaire in the cargo terminal of Brussels airport. None had recently been to a malarious area. One of them died.

In the 1970s several cases of malaria were reported in France in which infected mosquitoes brought back from tropical Africa by aircraft were thought to have transmitted malaria by biting people who worked on, or lived near, the international airport. Cases of

what became known as airport malaria were later reported in Switzerland, the Netherlands, and Belgium.

In the very warm summer of 1983 four cases were reported in Britain—two associated with Gatwick Airport and two with Heathrow. One of the Gatwick patients was the landlord of a public house near the airport who had not been out of Britain for two years. Aircrew of flights from west Africa often went to this public house, and probably an infected mosquito had been conveyed from west Africa by air and then to the public house trapped in their clothing or hand luggage, where it emerged to bite the landlord and transmit falciparum malaria. The other Gatwick patient was a woman who cycled past the public house; possibly the same infected mosquito had survived long enough in the very hot weather to escape from the public house and bite this second victim. The two patients whose malaria was associated with Heathrow had travelled from Rome to London in an aircraft which had previously flown from east Africa. Possibly both had been bitten by an infected mosquito trapped in the plane in baggage or clothing, which protected it from the effects of the routine insecticidal spray.