LETTERS TO THE EDITOR

Focal neurological deficits and migraine at high altitude

The development of transient focal neurological deficits at high altitude is uncommon but well recognised. In the absence of concomitant altitude illness a thromboembolic aetiology has usually been presumed. In this case transient focal neurological deficits occurred at high altitude in clear association with migraine.

We report the case of a 57 year old right handed white man who had lived and worked at an altitude of 3840 m in the Nepal Himalaya for two years. He had a long history of migraine, with between 20 and 30 attacks (with and without aura) each year. His attacks with aura typically included homonymous visual disturbances, with only one episode before his high altitude sojourn involving additional focal neurological features. This occurred seven years previously and involved partial right sided dysphasia lasting 30 minutes and heaviness in the right upper limb that persisted for a few hours. He had a strong family history of migraine, including one sibling who had experienced a short lived hemiplegia during one attack.

While living at high altitude his migraines did not occur more often than usual, but several attacks were associated with focal neurological features. These three attacks were preceded by numbness of one arm (twice on the right, once on the left) that resolved within 30 minutes of treatment with ergotamine. All three attacks occurred at altitudes of around 3800 m and were not associated with any particular activity. The most dramatic focal event occurred while climbing on a 6100 m mountain. He ascended to 5600 m and experienced symptoms of acute mountain sickness and had acclimatised well to a high camp at 5600 m. Having spent the night at this camp, he climbed for one hour to an altitude of around 5900 m when he noticed that his vision started to blur. This progressed to flashing lights near the centre of vision, with half field predominance and scotomalous patchy visual loss, all typical of his migraine aura. Ten minutes later, while informing his companions that he would be unable to ascend further, he found that he had difficulty finding the correct words. He was accompanied down to base camp (5000 m) over one hour during which time a mild left sided frontal headache developed, he became unable to speak, and moderate weakness developed in his right arm such that he had difficulty holding objects. At no stage did he have problems understanding the speech of others or difficulty walking.

Chickenpox and multiple sclerosis: a case report

Multiple sclerosis is a common, initially mostly relapsing-remitting, demyelinating disease of the CNS. Despite vigorous effort, the aetiology has not yet been elucidated. It is believed that, on the basis of a specific immunogenetic background, exogenous factors may trigger an immunological process that leads to focal demyelination in the CNS. Moreover, the precipitation of individual exacerbations in affected patients may probably also be triggered by exogenous factors. Viral infections have been discussed as an aetiological factor of the disease, and reports of vaccine attacks have been documented.6 We report here the precipitation of an acute exacerbation of multiple sclerosis by varicella in an adult.

One week before admission, the 27 year old white male patient experienced the rapid appearance of successive crops of vesicles on skin and mucous membranes typical of varicella, accompanied by pruritus, slight fever, malaise, and anorexia. He acquired the disease from his wife, a medical student, who had had chickenpox two weeks earlier and was in the convalescent stage at that time. The patient had not had chickenpox before the illness. Five days after the onset of the rash he felt bilateral upper limb numbness and tingling, especially in the trunk, face, and scalp. He had a slight right sided hemiparesis. He was unable to walk. His medical history was remarkable except for hypothyroidism of the right hand that resolved spontaneously one year earlier. The present medical examination disclosed only a chickenpox rash in varying stages of development and expected findings in the trunk, face, and scalp. The neurological examination, the cranial nerves were unremarkable except for cogwheeling of the right hand at the level of the shoulder and proximal part of the arm, and were normal below this level. The patient was able to walk normally. The somatosensory evoked potentials of the upper and lower extremities were normal. He had normal power and reflexes. The cerebrospinal fluid was also normal. The course of the illness was uneventful and the patient was discharged from the hospital on the 6th day of admission.