Letters to the editor

‘Acute bilateral thalamic necrosis in a child with Mycoplasma pneumoniae’

SIR—I read with great interest the case report by Ashtekar and colleagues that concerns a 5-year-old boy who recovered from acute bilateral thalamic necrosis due to Mycoplasma pneumoniae with only minor deficits. Acute necrotizing encephalopathy of childhood (ANEC) is the accepted terminology for this particular acute childhood encephalopathy, with striking neuroimaging changes described by many authors. One of the many reasons for this is that the bilateral thalami are not the only regions involved. Cerebral white matter, the cerebellar medulla, and brainstem tegmentum are also involved in more than 50% of our participants, and we would appreciate information on those areas in the patient reported by Ashtekar and colleagues.

More than 80 participants of ANEC have been reported from Japan and Taiwan. Until now, only a few case reports have been published in the English literature outside these two countries. These include reports from the USA, UK, Italy, Portugal, Spain, Belgium, Greece, and Korea. The boy report by Ashtekar and colleagues is certainly important because he is not Asian; one patient reported from Germany was actually an immigrant from Japan. Race is truly a very significant factor for ANEC.

Influenza viral infections, predominantly type A but also B, have frequently been associated with ANEC, and may cause small epidemics in Japan. However, other viral infections of measles, chickenpox, roseola infantum, and exanthem subitum have been reported. M. pneumoniae encephalopathy reported in a 75-year-old man, was not ANEC at all. My colleagues and I treated an 8-month-old child with unilateral and we would appreciate information on those areas in the patient reported by Ashtekar and colleagues.

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Although the pathogenesis of ANEC is still uncertain, increasing numbers of authors believe that some virus, or its variants, will usually rapidly start (within 24 to 48 hours) intracranial cytokine storms that cause blood-brain-barrier damage in a particular brain region. This results in localized oedema and other pathological changes, such as congestion or haemorrhage, without signs of direct viral invasion and parainfectious demyelination. Certain symptomatic medications used in the early stages of viral infection may play some similar roles in ANEC as those played by salicylates in Rye syndrome.

References

‘Gayatri et al. reply’

SIR–We are very grateful for Dr Wang’s comments on acute necrotizing encephalopathy of childhood (ANEC). We acknowledged the entity of ANEC as one of the causes of acute bilateral thalamic necrosis in our article. The earliest report of acute bilateral thalamic necrosis that we have found so far was associated with measles. However, patients previously reported as ANEC have rather different but uniform imaging appearances that affect brainstem, cerebellum, and white matter in addition to thalami. In our patient the involvement...
was largely restricted to the thalami, without involvement of the brainstem or cerebellum, but there was signal change in the posterior capsular regions, probably reflecting oedema rather than contiguous disease. The striatal structures were spared.

In addition, brainstem-evoked responses, which are frequently abnormal in the individuals with ANEC, were normal in our patient, as were the liver enzymes; although these are raised in the majority of reported patients with ANEC.4

The prognosis of ANEC is poor, and sequelae include ataxia, cerebellar dysarthria, and extra ocular palsies, in addition to spastic paresis and dystonia. In our patient, the sequelae were consistent with isolated thalamic involvement consisting of spastic paresis, dystonia, and dysarthria.

The published data regarding ANEC does not provide results of Mycoplasma pneumoniae serology except in one patient reported by Wang et al.6 It is possible that some of these patients with ANEC may have been associated with M. pneumoniae. This means that, although a similar disease process may result in central nervous system necrotic lesions following infection by viruses or M. pneumoniae, the pathology, location, and expression of the disease probably varies depending on environmental, as well as genetic host and pathogen factors.

We agree with Campistol et al. that infantile bilateral thalamic necrosis may be a more appropriate term than ANEC. Within the spectrum of patients previously described under the umbrella label of having ANEC, there may be a distinct substrata of patients in which there is isolated or predominant acute bilateral thalamic necrosis, which may be associated with M. pneumoniae or viral infection. We also agree that infantile bilateral thalamic necrosis/ANEC may be specific, age-related, predominantly thalamic, varieties of acute demyelinating encephalomyelitis.

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References

XIV. IFTA World Family Therapy Congress
organized by The International Family Therapy Association (IFTA) and the Turkish Association of Marital and Family Therapy (AETD)

Istanbul, Turkey, on 24–27 March, 2004

The theme of the congress is ‘Families in a time of Global Crisis’. Other themes include theory, clinical intervention and research on prevention, impact, healing and resilience of families.

The XIV. IFTA World Congress will ask questions about what happens to families, children, parents and communities once the immediate crisis has passed. How do families cope with the loss of loved ones, of country and community? Can healing practices make a difference? What role does therapeutic help in providing an integrated approach which will effect regeneration and rebirth for the many millions affected by such events?

This congress will attempt to tackle this global theme through a series of plenaries, sub-plenaries and workshops, which will involve participants in dialogues about these universal themes.

FIRST DAY – model for understanding the impact of natural and man made disastrous events on families and family life
SECOND DAY – effective intervention in family and community life in a time of global crisis
THIRD DAY – helping families and communities develop resilience, hope and empowerment

Please visit the congress website by clicking to www.ifta2004.org which is a source of information on the congress, the scientific and social program and of course your host city Istanbul.

We look forward to welcoming you!

Murat Dokur, MD (President, AETD; President of the Local Organizing Committee)
Arnon Bentovim, MD, FRC Psych (President IFTA)
Chana Winer, Ph.D (Past - President IFTA)