Conclusion

No case resembling a fatal encephalitis due to an unidentified viral pathogen was coded in the records of the Gold Coast Hospital between 1980 and 1996. If enzootic infection with lyssavirus in Gold Coast bat populations was widespread during that period, and if infection is usually fatal in humans, then transmission from bats to humans appears to be an uncommon event.

References

1. Crerar S, Longbottom H, Rooney J, Thornber P. Human health aspects of a possible lyssavirus in a black flying fox. *Comm Dis Intell* 1996;20:325.
2. Allworth A, Murray K, Morgan J. A human case of encephalitis due to a lyssavirus recently identified in bats. *Comm Dis Intell* 1996;20:504.

An outbreak of dengue 2 in the Torres Strait

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On 9 December 1996, the Centre for Public Health Sciences, Brisbane, notified the Tropical Public Health Unit, Cairns, that a Torres Strait resident had tested positive for dengue serotype 2 IgM. The Torres Strait experienced a large outbreak of dengue 1 in 1981[1] and a small outbreak of dengue 1 (centred on Thursday Island) in 1990-91[2].

The patient had been to Papua New Guinea during the incubation period and had presumably acquired the infection there[3]. The patient had been viraemic for about a week after the onset of symptoms in late October. In early December an acute illness, characterised by fever, headache, prostration, backache and diarrhoea began to affect many of the residents of the island on which the patient lived (population about 300).

Within 48 hours of the notification, mosquito surveillance and control activities had commenced, community education had begun and health staff throughout the Torres Strait had been alerted to the diagnosis and briefed about dengue.

A house-to-house survey on the island revealed prolific numbers of *Aedes aegypti*, the dengue vector. The Breteau index (the number of breeding containers per 100 premises) was 167; an index of >50 is considered a high risk for dengue transmission[1]. Most *Ae. aegypti* breeding was in containers such as rainwater tanks, tyres, buckets, 44 gallon drums and plant containers. Disposable containers were emptied of water while water storage containers were treated with an insect growth regulator (methoprene).

To date, nearly 70 residents of the island have tested positive for dengue, but there are many more who have had compatible symptoms. Although there are now very few new cases being reported from the island, it was inevitable that cases would occur on other islands in the Torres Strait. Cases of dengue became apparent on two nearby islands in mid and late December. Mosquito surveillance on these islands also revealed intense *Ae. aegypti* activity. To date 34 residents of these two islands have proven dengue 2 infection.

Altogether there have so far been 116 confirmed cases of dengue in the Torres Strait, and it now appears that cases are beginning to occur on other islands. Strategies will need to be planned to minimise the risk of future outbreaks of dengue, which could, of course, result in severe haemorrhagic dengue, especially in children[1].

References

1. Kay BH, Barker-Hudson P, Stallman ND *et al*. Dengue fever: reappearance in north Queensland after 28 years. *Med J Aust* 1984;140:284-288.
2. Centre for Arbovirus Reference and Research. Arbovirus activity in Queensland. *Comm Dis Intell* 1991;15:170.
3. Hanna J, Ritchie S, Tiley S, Phillips D. Dengue imported from Papua New Guinea. *Comm Dis Intell* 1995;19:447.
4. Hayes EB, Gubier DJ. Dengue and dengue hemorrhegic fever. *Pediatr Infect Dis J* 1992;11:311-317.

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