



## **Acute mountain sickness and driving at high altitude: caution is required due to the sudden onset of dysfunction**

Recent experience in August 2004 with a tour group of 30 travelling in cars from Beijing via the northern Silk Road to Urumqi, across the Taklimakan desert to Golmud and then to Lhasa, highlights the difficulties to be faced with acute mountain sickness (AMS).

As susceptibility to mountain sickness cannot be forecast,<sup>1,2</sup> those on self-drive tours such as ours have to be wary of its possible effects. AMS is a common experience for people using this northern approach road to Lhasa.<sup>3</sup> Though we were at 2500+ metres for the preceding several days (as planned protection from AMS), our group's experience was alarming, with unheralded rapid onset of serious cerebral dysfunction.

On the day we left Golmud to cross the Tibetan Plateau, at the evening meal at Tuotuo Heyan (4500 metres), four people were found to have developed marked cerebral dysfunction with inertia, confusion, and incoherence. They had exhibited no symptoms until then.

Descent to a lower altitude was not possible; shelter was found, and with initial oxygen for an hour; followed by strict bed rest, oral fluids, dexamethasone, and acetazolamide, along with overnight supervision; all were stable and coherent with only minor AMS symptoms by the morning. Next day there were two more mild cases with all six recovering after a night at 4100 metres.

With the progressive reduction of barriers to travel in China, unrestricted self-drive touring may well be possible by the 2008 Olympics. Other New Zealanders have recently toured in this fashion.<sup>4</sup> Preventive measures help protect driver competence but these cannot be relied on.

Based on our experience, printed guidelines should include a suggested *precautionary rule*<sup>1</sup> of once over 2500 metres only gaining 600 metres between places where sleeping, and, if minor symptoms of AMS appear, staying at that sleeping height for another 24 hours. Having an altitude meter (a hand-held GPS also performs that function) would also assist in preventing this potentially dangerous, and difficult to predict, disorder in those planning self-drive touring at altitudes over 2500 metres.

(My thanks to Marty Lemberg and the staff of the Otumoetai Health Centre, Tauranga for their advice and support, and for arranging the necessary supplies.)

Derry Seddon

Retired GP

Tauranga

[derry.seddon@xtra.co.nz](mailto:derry.seddon@xtra.co.nz)

### **References:**

1. Hackett PH, Roach RC. High-altitude illness. *N Engl J Med*. 2001;345:107–14.
2. Young, Ruff. *Manual of Travel Medicine*. Section on Altitude Sickness; 1999.

3. French P. Tibet, Tibet: A Personal History of a Lost Land. Harper Perennial; 2004, p140–6.
4. Chandler C. Preparing for an overland adventure; 4WD to China and way beyond. New Zealand 4WD, March 2005, p48–9.