CASE REPORT
High Altitude Cerebral Oedema - A Rescue

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Cerebral oedema is easy. You go down. Well, like many things in medicine it is easy in retrospect.

Last October, four of us were on our way back from the Medical Expeditions base camp on Kanchenjunga. Gill, Rick, Alan and I had planned a small detour up a 6,200 metre peak called Tengkongma, with the help of Dawa, our sirdar. We had all walked up to base camp slowly and were well acclimatised.

A couple of days earlier we had inspected the route and mistakenly headed up the wrong gully. We thought we now knew the route so we were irritated when the porters again turned up from the valley too soon. Much yelling and gesticulating achieved nothing but confusion. Alan got increasingly upset and kept asking why they had gone up the wrong route. After about the twentieth time of asking I snapped and said that if I knew the answer I would certainly have told him by now. Dawa shot on and caught them up and then signalled a compromise route to us which involved a horrendous climb alongside a scree slope. I was soon too busy trying to breathe to worry about the route.

Every few steps left me breathless. As I struggled to keep up with Gill and Rick I noticed Alan striding on ahead. Fantastic views across the valley to Kanchenjunga and other peaks kept our morale up. Eventually we reached a traverse and then cut into the valley leading up to Tengkongma where we spotted our porters heading back down the valley. They had been to the high camp and set up tents at the foot of the glacier - an easy day’s stroll for them. After stopping for a while we set off down a steep scree descent. This brought a change of fortune for me and I sped on ahead with Dawa leaving Alan far behind. I was not unduly concerned. Many people have difficulty on steep descents and Alan had said he had been seriously scared on a scree slope a few days earlier so I was not surprised that he was slow. The route led down to a river and then ascended through a big boulder field and alongside a waterfall to the tents. By 2.45 pm I had reached the camp and was delighted to see Dorje, our cook-boy brewing tea on a stove sheltered under a large rock. It was nearly half an hour before Rick arrived carrying Alan's pack. Another 15 minutes later Gill arrived supporting Alan who was exhausted, cold and complaining of headache. We got him straight to his tent, gave him some hot soup and some painkillers for his headache and hoped he would soon feel better.

The glacier ended at an icewall a few yards from the tents and looked very inviting so the others wasted no time in kitting up to practise some climbing and plan the route for the next day. As the only doctor in the group, I stayed back to keep an eye on Alan. We were at about 5500 metres. He had spent a week at 5000 metres and been for two separate day walks to 5400 without trouble but now he clearly had at least moderate AMS and severe exhaustion and cold. I contemplated descent but the prospect was daunting to say the least. The route we came up was not an option

because of the ascent involved. Going straight down the gully would be a difficult scramble down a big boulder field with a long way to go before we lost any significant altitude. Most of the journey would be in the dark. I radioed base camp and was at least able to discuss the case with experts in high altitude medicine. It may seem easy now to say that we should have headed straight down. But the prospect was horrendous and he didn't initially have signs of serious illness. But his headache got worse and he started vomiting. Examining someone in a small one-man tent in the cold is not easy but he was clearly deteriorating and said he felt very ill. He was beginning to get a bit confused. I forced him up to see if he could walk and was shocked by his ataxia. There was no doubt he had cerebral oedema. Nightmare or no nightmare we had to go down and it was now 5 pm.

We abandoned camp with alacrity leaving Dorje to sort things out there. I gave Alan 500 mg of acetazolamide and 8 mg dexamethasone most of which he promptly vomited. He needed two people to support him taking nearly all his weight. The nimble Dawa took one side nearly all the way and we took turns on the other. There was thick mist and no moon so we were soon walking by torchlight. We would manage barely twenty yards before he would need a rest. Even sitting down he still needed support and tended to drift off to sleep. On several occasions his breathing became very slow and shallow and he appeared to be slipping into coma. We shouted at him to keep breathing and not to fall asleep. I gave him some more dexamethasone which he kept down. We followed the gully down, scrambling over large boulders walking three abreast and it took a lot of concentration to avoid stumbling. Never have I blessed my trekking pole so much.

Also invaluable was our radio. As soon as we set off we were able to ask for a rescue team to meet us and we stayed in radio contact all the time. Once they started up the Tengkongma gully we spoke to them every few minutes but we were all on new terrain and there was no way for either party to identify our position or even know if we were on the same route. Because we were losing altitude so slowly Alan's increasing exhaustion outweighed any benefit from the increasing oxygen pressure. We frequently had to force him on when he asked for a rest. When we did stop it was worse for us as we had to keep shaking him and shouting at him to keep him awake. Gill was brilliant at keeping up a "conversation" with him. Whenever we stopped we listened out for the others. We whistled, we yodelled, we shone torches into the mist but all to no avail. As the rests grew longer and more frequent I got more scared. On several occasions I thought we were losing him.

Finally a glow in the distance heralded our rescuers. One of their Sherpas had spotted us and came running to us. Frustratingly he had got disorientated and for a while couldn't find the rest of the team but suddenly we were surrounded by people. It was now 9.30 pm. After an injection of dexamethasone and a few minutes on oxygen, Alan was soon looking a lot better. Progress down the hill was barely faster though, partly because it was getting much steeper and turned into scree. But at least he could have oxygen at each of the stops. I was able to stop supporting Alan now which was as well as I was getting seriously exhausted myself. I was glad to be able to hand over clinical responsibility to Paul Richards, the expedition doctor and concentrate on getting myself down. At one point I lost my footing and did a spectacular somersault, but apart from a badly bruised knee, all was well. Even

Dawa took a nasty fall cutting his hand badly.

Finally, at 11.40 pm we reached the valley. The rescue team had kindly put up some tents there to save the long slog back to base camp and Paul stayed to keep an eye on Alan overnight. By morning Alan was considerably better with symptoms of a hangover but he managed to slowly walk back to base camp with Paul. After a few days there with a continuing headache, he descended further to make a full recovery.

This was not an experience I would like to repeat. It emphasised the unpredictability of mountain sickness. Alan was the best acclimatised of us and had been almost as high as our camp a couple of days previously with no ill effects. Going “downhill” can be all the more difficult if it is not steep. Boulder fields can be treacherous in the dark and we were not reaching any denser air. Oral acetazolamide and dexamethasone are useless in a vomiting patient!

I next met a very fit Alan on the last day of the trek. Mercifully for him he could remember little of that eventful evening except that he had promised to buy me a beer!

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