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Adventitia

Breathless on Everest – I

"The problem with Everest is that it is just too damned high." This is not an original or surprising statement, but is one I made to myself several times as I struggled up the Lhotse face, desperately breathless and wishing that the mountain was just 10 000 feet lower. Everest is, of course, very high. At 29 028 feet it is approaching the edge of the earth's atmosphere and its summit often lies in the jet stream. Fiercesome winds of 120 miles an hour or more, which can easily sweep men and all their belongings off the mountain, are commonplace. Because of its height the air is, of course, also very thin. The atmospheric pressure is 253 mm Hg, one third the level at sea level, and that is the level of hypoxia with which climbers have to contend.

The mountain was first climbed in 1953, largely as a result of the work of Dr Griffith Pugh, physiologist with the MRC. He had accompanied an expedition to the base of the mountain in 1951 and made calculations of likely water loss, heat loss, and need for oxygen supplementation. Pugh's rules still hold. Most climbers use 2 l/min oxygen between Camp 3 at 23 500 feet and Camp 4 at 26 000 feet and then 3–4 litres of oxygen to get to the summit. No one had ever really tested Pugh's rules, so when I was asked to join the British 40th Anniversary Everest Expedition and given the rather grandiose title of High Altitude Physiologist, I thought that I would try, using modern miniaturised equipment, to see how hypoxic people get at these altitudes and to determine the effect of added oxygen.

The British 40th Anniversary Expedition to Everest had three main aims. The first was to commemorate Hunt's expedition and to follow the same route that Hillary and Tenzing had used in their triumphant ascent. The second was to raise money for the Himalayan Trust which was set up by Sir Edmund Hillary to provide schools and hospitals in the Khumbu region of Nepal but had recently become concerned with conservation in that increasingly desolate mountain region. The third was to put the first British woman on the summit of the mountain. As everyone now knows Rebecca Stephens made the summit in grand style, alone save for two Sherpas, and has got her name into the record books.

At the time I was invited to join the expedition I had very little climbing experience so I took myself on a crash training course which meant inveigling climbing friends into carting me up and down mountains. By the time I left for Everest I had terrified myself on rock crags and snow gullies all over Scotland and sheer limestone rock faces in Tuscany. I was not prepared, however, for the conditions I would experience on Everest.

We set off on 16 March 1993 from Kathmandu taking a bus to Jiri, a distance of 80 miles. The rest of the trip, approximately 150 miles, we had to walk. We arrived at Everest base camp, which is at 17 500 feet, on 7 April 1993 and sat there looking up at the majestic Khumbu icefall above us. The icefall has claimed more lives on Everest than any other part of the mountain. I set up my tent looking directly up the icefall, just to remind myself every day how frightening it can be. The icefall consists of huge blocks of ice moving at about three feet a day. They are very unstable and constantly falling. Each one may be as big as a cathedral. Between them there are crevasses 100 feet deep. We climbed the blocks of ice on jumars and crampons and crossed the crevasses on roped aluminium ladders. I crossed it six times and that was undoubtedly six times too many. To cross it we would leave at about 2.00 am and the great blocks of ice would be illuminated by the several head torches of the small party winding their way up this unstable environment.

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[Part II of Breathless on Everest appears on page 269]

Contributions to this column are encouraged (maximum 600 words), otherwise the column will close. – SGS