By this time rescuers on the ground were yelling up to Cam. They had good intentions, trying to find out what was going on, but Cam needed to concentrate on what she had to do and she finally had to ask the rescuers to give her a moment

Up at the Shortest Straw anchor, I couldn't hear what they were saying and everything seemed to take forever and in my little bubble I was think-

ing, "Ow, hurry up!"

Cam had the haul bag on her rappel loop, so it was quite heavy for her when she was off rappel at the fixed gear. On rappel, its weight was on the descender, but passing the knot was still quite a hassle for her. She finally

got to the ground and yelled up at me to come down.

With the rope clipped off I was able to rappel right to the fixed pieces, and Cam had left some slings there for me to grab. It was still a bit over-hanging. As before, I clipped in an etrier for my good foot and used it to un-weight the rope when I needed to; I hung off my chest harness the rest of the time. But I was swinging around so it was tricky and every little move was another "Ow!"

I set up the descender below the knot, transferred my weight, released the rope from the wall, and swung out a couple of feet. Then I went straight to the ground, or rather, into the arms of the rescue team, who helped me into a litter. From the time of my fall it had taken me three hours to go

down three rope-lengths.

They started an IV and morphine immediately and carried me straight down the talus. It was 2:00 a.m. by the time we got to the road. I was flown to Modesto where it took a CAT scan to discover that I'd broken the pubic ramus in my pelvis. The weird thing was that the huge swelling wasn't blood, but lymph, as though I'd ruptured a lymph duct. They released me that day and Cam drove me home in the van, flat on my back, all doped up. I'm 100 percent healed now, several months later, and back on the rock.

Analysis

In hindsight I should have dug out the hammer and tried a piton instead of relying on a head I didn't trust. I also should have trusted my judgment and improved that corner piece that pulled. That may have made the difference in my injury. Being competent on the ropes helped a lot to get us down, but I think our tiny headlamps would have been a problem if we'd had to see farther to spot anchors, so I also carry a longer-range model now. (Source: Scott Ring and John Dill, NPS Ranger, Yosemite National Park)

FALL ON ROCK, INADEQUATE PROTECTION, NO HARD HAT California, Yosemite Valley, Lower Cathedral Rock

On May 21, Chris Hampson (28) and Sibylle Hechtel (52) teamed up to climb Overhang Bypass on Lower Cathedral Rock. The route is approximately six pitches, originally rated 5.6 but considered more difficult since a large block fell from the crux a number of years ago, creating a mandatory 5.8/5.9 mantle. Their plan was to climb the route and top-rope Overhang Overpass, a 5.11 crack accessible from the upper section of Overhang Bypass.

Both Chris and Sibylle had climbed extensively in Yosemite, Chris having spent the last month climbing full time in the Valley, and Sibylle having decades of Yosemite experience under her belt. This was their second route

together, and it was well within their abilities.

Chris led the first pitch up easy climbing without placing any protection. Sibylle led the second pitch, to the base of the Hog Trough. The Trough is a system of ledges traversing up and left for just over 100 feet to where the route turns upward through the crux mantle. After this move, the pitch

turns back right through moderate but loose terrain.

Chris headed up the Trough and clipped the rope through protection about 30 feet beyond the belay. After another 60 feet or so of easy climbing, he passed a tree, climbing between the tree and the wall so that his rope ran behind its trunk. Though he did not clip his rope to the tree, by climbing behind it he created a "natural" piece of protection. The crux mantle is 15-20 feet beyond this tree, and as Chris continued up the ledges toward

the mantle, he climbed out of Sibylle's view.

A few minutes later Sibylle heard Chris yell and felt the rope jerk tight under the force of a fall. She still could not see him from her belay, and her own yells brought no answer, but she could feel his weight on the rope. Within five minutes or so, while Sibylle was calling to Chris, Bob Jensen arrived, having soloed the lower section of the route. After learning what had happened, Bob continued up the Trough to the tree. From there he could just see Chris, hanging at least fifty feet below, his rope having caught around the tree's trunk. When Bob called down to him, Chris answered in a disoriented manner and said that he could not see. Without any gear to reach him, Bob soloed back down the route and went for help while Sibylle escaped the anchor and climbed up to the tree to communicate with Chris. When Bob left it was about 11:30 a.m., roughly fifteen or twenty minutes after Chris's accident. Over the next hour Chris's condition deteriorated until Sibylle could only hear an occasional yell or moan from below.

Bob reached the rescue office in Yosemite Valley about forty five minutes later. After hearing the situation, Ranger Keith Lober and I immediately headed for the route while a larger group geared up to follow. We arrived at Lower Cathedral Rock about 12:45 and saw Chris through binoculars. He was hanging by his rope in a corner, about 70 feet below the tree, sitting upright and moving his arms. Keith and I reached Sibylle at the top of the Hog Trough by approximately 1:30 p.m. Unfortunately no quick, adequate protection was available where we needed it, and the tree that had caught Chris's fall appeared far from solid, so we immediately began drilling bolt anchors.

Five minutes before we reached Sibylle, our spotter, watching through a telescope from across the Valley, radioed that Chris had stopped moving and was now slumped over backwards. By the time we reached him about twenty minutes later (but almost three hours after the fall) he was beyond resuscitation. We are not certain what injury killed him, but it was probably

a combination of head and chest trauma, perhaps with additional physiological stress from hanging for so long in his harness.

Analysis

Chris was familiar with Yosemite's rock and comfortable leading well beyond the level of this route. We don't know what caused his fall, but we do know a couple of things that made it longer and more damaging than

it might have been.

Based on the amount of rope between Chris and the tree that caught him, he may have fallen over a hundred feet. Once he was out of Sibylle's view, the time that passed and the rope she fed out suggest that he climbed beyond the crux mantle into the moderate terrain above. He may have been 50–60 feet beyond the tree when something went wrong.

The tree may have been Chris's last piece of protection. We did find a single stopper clipped to the rope immediately above his harness, but details suggest that he clipped this piece to the rope after his fall in order to secure

his backpack—which we found hanging from the same carabiner.

Protecting the mantle well is difficult though possible, and Chris either ignored or missed a fixed piton just past the tree. Gear options in the moderate terrain above are also sparse, though protection is available. Whether he fell at the crux or 40 feet beyond, the length of that fall clearly would

have been less had he placed additional protection.

In addition to potentially "running it out" on terrain where he felt comfortable, Chris was also not wearing a helmet. The crux is steep, but the overall angle of the route is less than vertical, and Chris likely hit several ledges as he tumbled down the wall. Though a helmet might not have saved his life, it certainly would have improved the odds. (Source: Lincoln Else, NPS Ranger, Yosemite National Park)

FALL ON ROCK

California, Yosemite Valley, Manure Pile Buttress

On May 23, Irene Appelbaum (41) and Ricardo Lagos (28) climbed the Nutcracker (five pitches, 5.8) on Manure Pile Buttress, with Ricardo taking all the leads. On the final pitch, he placed a small cam just above the crux 5.8 mantle and did the move. He then finished the remaining 80–100 foot

slab, setting one more cam along the way.

At the top, Ricardo rigged his anchor ten feet back from the edge but sat at the lip so that he could talk with Irene. He belayed her through a Reverso (in autolock mode) clipped to the anchor. He kept a fairly tight rope, with just a little slack. He felt Irene come quickly up the short slab at the start of the pitch, then slow down at the corner leading to the mantle. When he felt her move up again, he lifted the rope a foot or two to pull in the slack, and just as he started to pull the slack through the Reverso, she fell. There was no significant slippage through the belay.

The corner is steep and perhaps eight or ten feet high, with the mantle as its exit move. Except for a narrow ledge a couple of feet above the slab, footholds are scarce until one passes the mantle. Although Irene had climbed