

and side, her head pointed down the slope. The companions were worried about a neck injury, and, while waiting for the ambulance, moved her only enough to calm her and make her comfortable. Another climber came by and helped them dig a trench in the snow to support the victim. Down jackets and vests were used to line the trench and were also piled on top of her. After transport to the hospital, it was found that she had a concussion, a broken shoulder blade, colorbone, and ribs. (Source: John Whyte)

Analysis

Climbing conditions were fair in the morning, but the sun came out about 1430, and it started to get warmer. The temperature was above freezing that day, and water could be expected to be running behind the ice. Fortunately, the climber was wearing a hard hat, even though she had remarked that it was uncomfortably warm. (Source: John Whyte and Martin Taylor)

AVALANCHE, FALL, INADEQUATE EQUIPMENT

Quebec, Charlevoix Mountains, Montagne Blanche

At 1515 on March 3, 1985, a party of experienced skiers was approaching base camp at the end of a tour around Montagne Blanche. They were on a ski-mountaineering training exercise, but had decided not to ascend the mountain because of high winds, estimated at 70 km/h. They were on a gentle slope around 500 meters elevation, near the tree line, just above a steeper slope that was clear of trees, and which seemed to be inviting a downhill run. One skier (23) started down, followed by a second, Jacques (24), who fell on the slope one third of the way down. Another skier (23) started down, triggering an avalanche near the top of the slope. The avalanche swept over Jacques and buried him before he had time to get up. It then caught the lower skier, but he was carried to the bottom of the slope unharmed. The snow finally came to rest in the form of thick blocks that looked like seracs packed together.

The trip leader closed the slope to further skiing, and organized a search, using everyone present. The searchers lined up facing downhill, and probed with skis, starting from where Jacques was last seen. Within ten minutes, they found one of his skis. They continued to dig. Occasionally they detected something beneath the snow, which, on excavation, proved to be a buried tree. The wind became all the more biting after sunset, with a temperature of -25°C . Three of the searchers had frozen feet. Finally, at 1915, well after dark, the search was abandoned, since there was no longer any hope of finding Jacques alive. The trip leader had retained all 12 people for the search while there was still any possibility of finding Jacques alive, but now he sent two messengers to Anse St. Jean, two hours away.

The next morning, the Quebec Provincial Police sent a helicopter with a search dog and its handler. They found Jacques' body lying face down under two meters of snow in the place where he had fallen, eight meters uphill from where his ski had been found. (Source: Jean Rondeau, Federation Quebecoise de la Montagne)

Analysis

There had been rain the day before the accident, followed by temperatures falling to -20°C the day of the accident. The snow was 1.5 meters deep at the crest of the slope, where it parted, exposing ice-covered rock. The skier was particularly unfortunate to have fallen just before the avalanche swept over him.

Probing with two-meter skis is clearly inadequate when the victim is two meters beneath

the snow surface. Recommendations for the future: more avalanche instruction, avalanche radio beacons, avalanche-probe ski poles. (Source: Jean Rendeau, Federation Quebecoise de la Montagne)

FALL ON ROCK, FAULTY USE OF BELAY DEVICE

Ontario, Milton, Rattlesnake Point

On April 27, 1985, a climber (30) with some experience was leading a pitch, belayed by someone (25-30) who had never climbed before. He found the pitch too difficult, fell, and shouted to his partner to hold him. From a height of about nine meters, he fell through the branches of a tree and hit the ground. It was later determined that he suffered a basal skull fracture, a cervical fracture, and internal injuries.

Meanwhile, the belayer was in a state of shock, and did not understand what happened. From the way he was holding the belay device (a Sticht Plate), it was obvious he had taken the correct action when the fall occurred. However, the device was connected to the wrong end of the rope—the end nearest the belayer, not the end nearest the climber.

The victim died in August having never regained consciousness. (Source: Brian Hibbert, Toronto)

Analysis

The belayer did not know how to set up the belay device, and the climber neglected to make certain that it was connected correctly. The belayer should have been positioned on the ground, rather than on a small ledge. Using a Sticht Plate is not the best way for a beginner to belay, since stopping a leader fall with this device takes a degree of experience. (Source: Brian Hibbert, Toronto)

FAILURE OF RAPPEL, CHOCKS PULLED OUT, INEXPERIENCE

Alberta, Rocky Mountains, near Banff

On May 26, 1985, an inexperienced climber (30) was beginning a rappel descent of the southwest face of Rundle Rock. When she committed her weight to the rope, her rappel anchor pulled out. She fell eight meters, landing with first impact on her left foot, and came to rest on her back on a patch of dirt. Her two climbing partners descended and moved her onto her left side. The other two climbers came to help, and one of them with first aid training examined her. She was conscious and alert, but in severe pain from her left heel and ankle, which were later found to be completely shattered. There were also some loosened teeth, a lacerated tongue, minor shock and minor concussion. (Her climbing partners also seemed to be in a mild state of shock from the experience. When first offered help, they replied that the victim would be "fine.") The victim's ankle was splinted, and an ambulance arrived. (Source: James Hinter and Karla Richards, Calgary and Banff)

Analysis

This accident might have been avoided had the victim and her climbing party been more experienced in protection placement and better overall group communication. Everyone assumed that someone else in the group had checked the placement of the protection. Additionally, more injury could have been caused by moving the victim prior to the medical inspection. First aid knowledge should be a prerequisite for at least one member of any climbing party. (Source: James Hinter and Karla Richards, Calgary and Banff)