will be able to walk and climb again. I realize that the accident was my fault and that I need to be more careful. Most important, climb for yourself, not to show off to others. (Source: Joe Busby)

## ROPE STUCK ON RAPPEL, STRANDED

## California, Yosemite Valley, Royal Arches

On June 16, 1993, around 1630, Erika Heine (19) and Tracy Walker (29) stuck their rope while rappelling on the Royal Arches descent route. They were at the third rappel station. They had tied a knot into the end of the rope as a safety precaution. While they were pulling the ropes through the upper anchor, the end with the knot got away from them and was out of reach before they realized it. After several attempts to get to it, they realized they would need assistance to get off the route.

#### **Analysis**

They just forgot about the knot until it was too late. They pulled the ropes, hoping the knot would go through. It didn't. The wall was blank in all directions, with the nearest possible protection 50 feet above. They didn't want to take a 100 plus foot fall onto their belay anchors. They decided against climbing the rope. In a remote area, and/or a storm rolling in (even Toulumne Meadow in summer), this kind of mistake can be fatal. (Source: Michael LaLone and John Dill, SAR Rangers, Yosemite National Park)

#### **KNEE DISLOCATED**

## California, Yosemite National Park, Doff Dome

On August 1, 1993, Andy Johnson (28) and Adrian Rose (24), from Scotland and England, were on the third pitch of Doff Dome when Rose's knee dislocated as he made a high step up to lead out. Johnson tied him off after he lowered to the ledge. Johnson prepared to lower Rose, but Rose could not tolerate the pain. They called for help.

A rescue followed. Rose's leg was immobilized, morphine sulfate administered for pain, and lowering completed. During the descent, the knee reduced itself. (Source: Kim Aufhauser, Ranger, Yosemite National Park)

## Analysis

Knee dislocations are rare, especially under conditions where little stress is being put on the joint. Shoulder dislocations are much more common, and usually there is a history of occurrence. If these events happen in remote areas, the consequences could be much greater. Knowing how to position one's body to induce a dislocation reduction and how to immobilize if need be are among the first aid skills to be considered for the back country climber. (Source: Jed Williamson)

## PROTECTION CAME OFF, SHOULDER DISLOCATION

### California, Yosemite Valley, Half Dome

On September 9, 1993, at 1700, I was dispatched to the SAR cache to work as the medic on a Half Dome SAR.Warner Braun, Pat Sullivan and I were flown to the base of Half Dome where we made contact with Fred Berman (27) who had injured his right shoulder while climbing.

Berman and his climbing partner were still rappelling when we arrived on scene. Braun and Sullivan scrambled a few hundred feet up a ledge system and helped secure anchors to continue lowering Berman.

Berman reached the ground about 2030. Berman was medically evaluated, an IV started and morphine administered for pain. Due to the lack of light and rugged terrain, we camped for the evening at the base of the climb. I continued to administer morphine throughout the night to counter Berman's pain.

At 0740 the helicopter landed at the base of Half Dome and Berman and I were flown to Crane Flat. Berman was then transported by ambulance to Yosemite Medical Clinic where he was diagnosed with an anterior dislocation of his right shoulder.

Berman told me he had been leading the pitch and was working on a traverse. He had done three "hook" moves and then moved on to some copperheads. While stepping from one copperhead to another, it gave way. Berman reached up with his right hand and caught a ledge (picture a one-armed pull up). Berman's weight pulling on his one arm dislocated his shoulder.

The injury occurred around 0830. Berman began descending immediately. His partner would lower him and than rappel down and continue their descent. While Berman was being lowered, the climbers spotted a group of three people hiking up to the base of Half Dome. Voice contact was established and one of the party of three hiked back down to contact Rangers. (Source: C. Robinson, NPS Ranger, Yosemite National Park)

(Editor's Note: John Dill, SAR Ranger, commented that these two should get ten points for self-help! It is to be encouraged, while recognizing that it may not always be advisable.)

# FALL ON ROCK, PROTECTION PROBABLY PULLED California, Yosemite Valley, Higher Cathedral Rock

On September 29, 1993, about 1100, Rui Ferreira walked into the Valley District office and reported his climbing partner, Gustavo Brillembourg (35) had fallen on Higher Cathedral Rock the previous evening and had died.

Ferreira told us that Brillembourg was leading the Northeast Buttress route (5.9, 12 pitches) about 1900. He was two pitches from the top when he took a leader fall. He fell a distance Ferreira estimated to be about 50 feet (later revised to 120 feet) before the belay caught him. Brillembourg was conscious and was able to help himself onto a ledge as Ferreira lowered him a short distance. The gear rack, which was slung over Brillembourg's shoulder, was dropped during the fall.

Ferreira climbed over to the ledge and found Brillembourg to have obvious deformity and bleeding to his left thigh and arm, and he complained of pain and deformity to the left side of his rib cage. He was having much difficulty breathing.

Ferreira anchored Brillembourg to the ledge and attempted to splint his injuries. He remained conscious, but breathing became increasingly difficult. His breathing eventually sounded wet and gurgling. Ferreira estimated that about two and a half hours after the fall Brillembourg stopped breathing. Ferreira performed CPR for about one hour, but then had to stop when he was too exhausted to continue. By this time it was well after dark. He had been yelling for help all this time but no one heard him.

Ferreira remained on the ledge with Brillembourg for the rest of the night. The next morning Ferreira collected as much gear as he could, freed their double rope, and about