What they had planned:
S-E of petit clocher du Portalet
(8 length 6b obl.)

Way that the climbers used
(access to the nord face)

Normal way to get on the site

Fall area
What happened

After the fall (30m) of his friend, the second climber went down (rappelling) to the patient on the second rope.

• impossible to turn over the patient ??
• vertical cliff
• lack of material
• patient has probable head injury, talks but is struggling hard
• second climber is shocked

• Informations collected after the rescue
• When the accident occurred a mountain guide (MFXB) and his clients were on the glacier.
• Below the Orny Hut he could hear someone calling for help.
• He got a brief information that he transmitted to the rescue center 144 and went on site.

• « Fall in the S-E du Petit Clocher, one person is hanging in his harness, and he is conscious »
After 20 min of walk/running, the guide could hear the patient from the moraine approx. 100m nearby, but:

- rescue is not in the S-E but on the first part between Nord face and the East face
- cliff is vertical even overhanging
- the person is conscious, he moves, but is hanging upside down about 40m over the ground

He passed the information to the crew which arrives from a previous mission at the Grd-Combin.
The crew arriving from another mission fly by, saw the patient moving, with attempts to hold his head upside.

They picked up the guide on the ridge nearby where he had run, and stopped at the Orny Hut for preparation.
280 m total
220 m from the relay
Summit altitude 2823 m
Briefing at the Orny Hut

**Problems**

- Due to rock fall it is too dangerous to have a drop area in the intervention axis.
- The guide on site evaluates the intervention as difficult. He knows that the crew is coming from the Grd Combin *without* technical material.
- Drill machine is not working.
- Call for a Lama with longline.

**Solution**

- Drop off area 40 m right of the axis.
- Stand by of a fourth guide at the Trient hut + call for all the guides of MFXB group.
- Ask for drill and ropes of the Orny hut.
- Pitons and hammer of the hut + pitons and friends of 2nd guide.
- Not available rapidly.
• First drop off of a guide 40m right from the intervention axis on an existing belay (spit)

• The crew could see the patient now with both arms hanging and without reaction or movements

• Second rotation for a guide and third rotation for a doctor-guide at the belay
Terrain on the intervention axis

- easy (3) slight descend, very unstable
- some points already there as shelter

While progressing

- refuel of the helicopter down the valley and then after pick up of a fourth mountain guide at the Trient Hut.
Drop off area
(2 spits, on site)

Access to the axis

Intervention Axis
1 piton / Belay
first friend of the belay
Friend of the patient rope
Third belay friend
Second belay friend
Belay assessment

**Worries**
- psy aspect: belay 4 points on 3 friends and 1 piton? We are 3 on them and we will add a 4th person by a rope cutting
  - height of the cliff?
  - length of the ropes?
- ground: nature of terrain?
  - guide alone with patient?
- Rock fall and rope rubbing

**Solution**
- check with other rescuers if OK for them
- enough ropes:
  - extension if necessary possible
- knowledge of terrain,
  - fourth guide will come when patient on ground
- terrain stable in the intervention axis,
  - double rope (1 stat, 1 dyn), no person underneath while rappelling
Medical assessment

• Patient lost consciousness during mission
• Patient lost carotid pulse before rappeling

• Patient to be repositioned head up before rappeling (freehanging)
• Because his head was knocking against the rocks

• Patient is in CR arrest at the bottom of the face
• Terrain not suitable for CPR
Aeronautical assessment

- Rock fall
- Wind and turbulence
While hoisting the terrestrial operation was suspended to avoid rock fall even if the helicopter was not directly underneath (zoom effect of the picture).
Crew point of view

• Lama with longline
• Wind and turbulence problems on the top and at the Hut
• No direct way for a quick « load and go » required 200 meters longline at least
• Drop off area only accessible with the hoist of the Alouette (hoist on the side against central hook of the Lama).
Guide’s point of view

• Crew is deviated from another mission and does not have all technical equipment (drill, ropes, etc.)
• Weather conditions deteriorating (rain, fog, wind)
• What to do with the patient in the wall? Position head down?
Doctor’s point of view

- Inaccessibility for medical treatment on site (position, rock fall, time already spent in compromising position)
- Even ground terrain not suitable for appropriate treatment (CPR)
- Proper medical intervention would have required another lift to an appropriate place and postpone definitive treatment
- Suspension syndrome algorithm not suitable for extreme situations

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Thank you for your attention