

10 – FALL, SCRAMBLING

GRAND CANYON



THE STORY:

A 32 y/o female hiking in a side canyon during a boating trip down the Colorado River fell while climbing up a loose vertical cliff band approx. 20' (6m) in height. Rescuers heard the resulting rock-fall and responded to the scene within a minute of the fall to find the patient unresponsive, positioned on her side on the slope below. The Pt was found at some distance from the base of the cliff indicating

she had tumbled in the fall. On exam @1230hrs. the Pt was U on AVPU with rapid shallow respirations. A bleeding wound was found on the back of her head. Her clothing was torn at the shoulder and hip. Vitals were: Pulse: rapid and difficult to palpate radially, Resp.: labored, shallow, and uneven, Skin: pale, cool, clammy.

What is your immediate Assessment and Treatment Plan.

At 1235, the patient's respirations had improved, becoming more deep and even. The wound on the back of her head was found to be a 3"(7.5cm) full depth laceration at the base of her skull. Misc.

bruises and abrasions were found on exam, no other obvious injuries were noted. Vitals were: Pulse: 96, Resp.: 24 and labored, B/P: UTA; radial pulses present, Pt U on AVPU.

Put the appropriate information from the story above into the correct spaces in the SOAP note.

Develop an Assessment for 1235hrs with Anticipated Problems and an appropriate Treatment Plan.

Respiratory rate, rhythm, and quality continued to improve. The Pt became pain responsive, moved against attempts to stabilize her on the slope and began vomiting at approx. 5 min. intervals. At 1330, a first aid kit, backboard that had doubled as a lunch table, and other extrication gear arrived on scene from the boats at the mouth of the side canyon along the Colorado.

The boaters were without communication in the bottom of the Grand Canyon. There were other parties on the river though their locations were unknown. Commercial parties often carry radios in this stretch of the river corridor, though they rarely work and satellite phones were then unavailable. The party has access to their 3 rafts and kayaks.

QUESTIONS

1. What is your most important goal (and greatest challenge) in managing this patient?
2. It is easy to become overwhelmed by the risk vs. benefit decisions involved in an evacuation like this. Can you construct a rational argument for staying in place with such a patient *and* an equally rational argument for evacuating this patient downriver?

ASSESSMENT AND TREATMENT PLAN

A = Assessment (Problem List)	A' = Anticipated Problems	P = Treatment Plan
1230		
Pt U on AVPU 2° TBI	cont. ↓ AVPU / airway control	stabilize / maint. airway
respiratory failure	respiratory arrest	PPV / monitor
bleeding wound back of head	cont. bleeding	direct pressure / bandage
1235		
↑ ICP 2° blunt head trauma w/ respiratory distress	vomiting / airway comp. respiratory failure	PROP / monitor / EVAC immobilize
unable to clear spine 2° ↓ AVPU	swelling	dress / bandage
3" lac. to back of head	bleeding / infection	clean / dress
abrasions to R hip & shoulder	infection	

NOTES

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What Actually Happened Next ...

<p>Word of the accident passed to a second river party who pulled into the eddy at the mouth of the canyon to explore. Eventually, this party was able to pass the information on to a river trip with a radio who travelled down river to a more open area of the canyon and were able to radio relay the story to the ranger station on the South Rim.</p> <p>@ 1330 The group of boaters using ropes and anchors began the evacuation of the Pt down the steep, slippery drops of the side canyon moving in the direction of the river (the only practical evac. plan). During this evacuation the Pt continued vomiting at intervals and the rescuers tried to time their movements down the short vertical drops to ensure an open airway.</p> <p>@ 1600 An NPS helicopter flew into the widest section of the side canyon just below the rescuers. The patient was loaded into a litter suspended below the NPS helicopter and short-hauled to an intermediate landing zone for transfer to an airmedical helicopter and a flight to the hospital in Flagstaff.</p> <p>Although the Pt's speech function and coordination are somewhat diminished when she is tired, she made significant neurological recovery over the course of two years.</p>