March, 2021

Welcome New Trip Leaders

Congratulations to Danielle Piscatelli, Michele Walter, and Davis Woodward, who were recently certified as Denver trip leaders.

Did You Miss the Ascending Hikes Leader Notice a Few Days Ago?

If so, go here to check it out:

https://drive.google.com/file/d/1qEoc4abB8kJZhJxTWl0HUjp49_2TbXVQ/view?usp=sharing
**Winter Trip Rules Update**


However, the CMC State Board has asked the State Council (representatives from all the area groups across the state) and the Board’s own Risk Management Committee to review current policies on avalanche training and winter travel, including requirements for CMC ice climbing instructors and leaders, with an eye towards implementing statewide CMC policies. The review process is likely to take several months.

**DS&L Seeking New Chair, Additional Members**

Looking for an opportunity to support the training and development of Denver leaders and to enhance the safety of CMC trips? Due to expiring terms and personal circumstances, some DS&L members will be stepping down in the near future. With the advent of “One CMC”, the Denver Group Council is seeking committed new DS&L members who will help re-examine DS&L’s role under One CMC, current training, hiker certification, and accident investigation programs.

Special thanks go to outgoing Chair Kevin Schaal who has ably guided the committee through a time of great change and challenges.
A Scenario for Treating Head Injuries

By Dave Ruscitto

You are leading a 12-person CMC group on an early Spring hike up James Peak. It is around noon and the group is on the way down after an enjoyable lunch on the summit. As you descend a rocky section of the trail, Jake, a 23-year-old who has been racing ahead of the group all day, takes a tumble. Several members of the party see him trip onto both hands before he rolls once, hitting his head on the trail. He lies still for several seconds before sitting up. There is blood on his face.

As the Trip Leader what are your first thoughts? Your CMC wilderness first aid training kicks in. You quickly move through Scene Size Up. The scene is safe, the mechanism of injury was a bounding fall, you and several others are already donning gloves, you know he’s your only patient. and until you do some assessment, you cannot determine if you will need any outside assistance.

You identified Mary as Medical Lead at the trailhead and she begins the Primary Assessment. Jake is bleeding profusely from a laceration above his right eye. Mary pulls out some gauze and places it on the wound. She has Jake apply firm pressure. The bleeding is under control. She looks in his mouth, sees no blood or other obstruction and determines that his airway is intact. His breathing is rapid and shallow. He has strong radial pulses. ABCs are complete.
Jake did not experience a high energy impact, so she is not concerned with spinal immobilization. Mary asks the relevant questions and determines that Jake’s Level of Responsiveness (LOR) is alert and oriented to person place and time, but he keeps asking what happened to him and if his dog is OK. He is A+O x 3. (Alert and Oriented to person, place, time, and events ranging from level 1 to 4). This perseveration (inappropriate repetition) is an altered mental status, so **D for Disability** remains a concern.

The weather is mild, and you are two miles from the trailhead. Mary grabs a thermal pad and has Jake sit on it. Another member grabs a puffy jacket out of Jake’s pack, ready to have him put it on after the physical exam. **E for Environment** is complete.

Mary’s **secondary assessment** starts with the **physical examination** and reveals no injuries other than a laceration and hematoma (goose egg) over the right eye and abrasions on both hands. He complains of a mild headache, pain in his hands and says he feels a bit nauseated. His vision is normal, but he did “see stars” for a minute or so after the fall. He has normal range of motion in both hands and has circulation, sensation and motion (CSM) in all four extremities.

His **past medical history** is unremarkable, and he states he has not had a previous head injury. The remaining **vital signs** are as follows:

- Pulse 110, regular and bounding (Normal is 60-100)
- Respirations 30, regular and shallow (Normal is 12-20)
- Skin is pink, warm and dry (Normal is PWD)
- Pupils are equal, round and reactive to light (Normal is PERRL)

Now that the assessments are complete, what is your **Problem List and Treatment Plan**?

<table>
<thead>
<tr>
<th>Problem</th>
<th>Basis</th>
<th>Treatment Plan</th>
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<tbody>
<tr>
<td>Closed head injury/possible concussion</td>
<td>Mechanism of injury</td>
<td>Direct pressure bandage on laceration</td>
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<tr>
<td></td>
<td>Headache</td>
<td></td>
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<td></td>
<td>Scalp wound/hematoma</td>
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<tr>
<td></td>
<td>Nausea</td>
<td>Evacuate by walking</td>
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<td></td>
<td>Confusion</td>
<td>out</td>
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<td></td>
<td>Monitor for changes</td>
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<td></td>
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<td>in mental status</td>
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<tr>
<td>Hyperventilation</td>
<td>Rapid pulse</td>
<td>Provide reassurance</td>
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<tr>
<td></td>
<td>Rapid respirations</td>
<td>Coach the patient to</td>
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<tr>
<td></td>
<td>Pain in the hands</td>
<td>breathe slowly and</td>
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<td></td>
<td></td>
<td>deeply</td>
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<tr>
<td>Hand abrasions</td>
<td>Physical exam</td>
<td>Irrigate with clean</td>
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<td>water to remove</td>
</tr>
<tr>
<td></td>
<td></td>
<td>debris</td>
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<tr>
<td></td>
<td></td>
<td>Wrap with gauze</td>
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</tbody>
</table>

The head injury is the most concerning because bleeding inside the head cannot be detected in the field and more serious symptoms may develop rapidly. In this case, Jake’s laceration may require stitches and he is confused, so an orderly evacuation is warranted. He should be monitored closely for any worsening symptoms on the hike out and should be evaluated in the emergency department. He may be driven to the hospital unless his symptoms worsen.

**More on Head Injuries**

Signs and symptoms of a mild head injury include:

- Confusion
- Temporarily blurred vision or “seeing stars”
- Ringing in the ears
- Nausea, isolated vomiting
- Headache, dizziness, sleepiness
- Personality changes, emotionally volatile
- Amnesia

These symptoms do not necessarily require evacuation unless (1) the patient had a loss of responsiveness or obvious altered mental status, even if they recover to A+O x 3 or 4 or the symptoms are not improving after 24 hours. If either of these two conditions exist a routine evacuation is warranted.
Signs and symptoms of a worsening head injury requiring a rapid evacuation include:

- Not A+O x 3 or 4
- Worsening headache
- Vision disturbances
- Protracted vomiting
- Lethargy, excessive sleepiness
- Loss of balance
- Seizures
- Disorientation, irritability, combativeness, coma
- Pulse decreases and bounds
- Continued hyperventilation, erratic respirations
- Unequal pupils

*Dave is a Wilderness EMT working part-time in the Emergency Department at the Highlands Ranch Hospital and volunteers with the Douglas County Search and Rescue Team.*

**Will the Snow Be Good at ??**

*By Robbie Monsma*

Planning a trip but your plans depend on the snow depth when you get there? Experiencing the old dilemma at the TH about whether to carry spikes, snowshoes, or both?

There is an easy way to find out fairly accurate snow-depths for your destination or to help you choose between destinations. The National Oceanographic and Atmospheric
Administration (NOAA) provides a free “projected snow depth” map that is updated every 3-5 days. It also offers a lot of info that may not matter to you. Just set the "Select Physical Element” menu to the left of the map to “Snow Depth." Directions on how to use the service are located at the bottom of the map. Although the information is “projected,” we have found the predictions fairly accurate once we get away from the TH. To use the NOAA snow depth map, go here: https://www.nohrsc.noaa.gov/interactive/html/map.html?

GaiaGPS offers a layer that modifies NOAA's Snow Depth map somewhat but is, in my opinion, harder to use and less finely-tuned than the NOAA site. I don’t see that layer on CalTopo but it’s probably there somewhere. Check your favorite navigation app.

Some weather apps may have their own free versions. Dark Sky does not but here is Weatherstreet’s:
Open Snow/Open Summit (https://opensnow.com) has done a really nice adaption of the NOAA map for its All-Access users ($29.99/year). It is a map “overlay” and is accessed (along with other NOAA overlays such as surface smoke and wind gusts) through the “Maps” menu in the top line of the site. The map labels snow depth as printed inches per each depth as well as by color. The color key is displayed prominently across the bottom of the map. Its biggest advantage over NOAA’s official map is how close you can zoom in without distorting the map. The snow depth layer is available both on desktop as shown below and on the Open Snow phone app.

[Image of the Open Snow map]

Robbie Monsma is a past Co-Chair of Denver Group and currently serves on the Denver Member Initiative Committee:
https://www.cmcdenver.org/specialinterests/denver-member-initiatives-committee-dmic