



The Great OEC Instructor Said:

“Good evening ladies and gentlemen.
Maintain perfusion. Good day.”

And then he left.....

© 2000, Tahoe Backcountry Ski Patrol. This OECTools.org document may be freely used, modified or copied for any non-profit purpose as long as this copyright notice is maintained.
Not reviewed by NSP. User has responsibility for determining fitness for use.



Perfusion: What Is It?

Delivery of oxygen and nutrients to
the tissues and organs of the body

© 2000, Tahoe Backcountry Ski Patrol. This OECTools.org document may be freely used, modified or copied for any non-profit purpose as long as this copyright notice is maintained.
Not reviewed by NSP. User has responsibility for determining fitness for use.



Perfusion: Why Is It So Important?

The vital organs will survive only minutes without oxygen and nutrients

© 2000, Tahoe Backcountry Ski Patrol. This OECTools.org document may be freely used, modified or copied for any non-profit purpose as long as this copyright notice is maintained.

Not reviewed by NSP. User has responsibility for determining fitness for use.



Perfusion: What Does It Require?

- Effective respiration
- Effective circulation
- Brain stem function



Same Thing Said Pooh:

It's a shocking affair

© 2000, Tahoe Backcountry Ski Patrol. This OECTools.org document may be freely used, modified or copied for any non-profit purpose as long as this copyright notice is maintained.
Not reviewed by NSP. User has responsibility for determining fitness for use.



Focus Tonight Is on Circulation

How can effective circulation fail?

© 2000, Tahoe Backcountry Ski Patrol. This OECTools.org document may be freely used, modified or copied for any non-profit purpose as long as this copyright notice is maintained.

Not reviewed by NSP. User has responsibility for determining fitness for use.



The Big Three:

- Fluid loss
- Pump failure
- Vessel failure



And Some More:

- Respiratory
- Anaphylaxis
- Chemical failure
- Fainting
- Septic



Hypovolemic - Fluid Loss

- External bleeding
- Internal bleeding
- About one quart loss causes shock
- Metabolic - diarrhea, vomiting, dehydration
- S/S - low BP, rapid, weak pulse, skin pale, clammy, cold



Cardiogenic - Pump Failure

- Heart attack - loss of blood to cardiac muscles
- Physical blockage
- Electrical failure
- Blunt trauma
- S/S - low BP, rapid, weak pulse, skin pale, clammy, cold, diaphoretic



Neurogenic - Vessel Failure

- Giving blood. Are we then 90% full
- Three muscle layers
- Substantial ability to expand and contract
- Controlled by brain stem/spinal cord
- S/S - low BP, normal to slow pulse, normal to dry skin



Signs of Circulatory Health

- Pulses
- Blood pressure
- Capillary refill
- Skin signs



Pulses

- Carotid
- Radial
- Brachial - used most frequently with infants
- Femoral
- Posterior tibial
- Dorsalis pedis



Blood Pressure

- Systolic - maximum pressure
- Diastolic - heart at rest pressure
- Written as 120/80



How Do We Take Blood Pressure?

- Measured by constricting upper arm
- Two methods...
 - Palpation - feeling radial pulse (systolic only)
120/P
 - Auscultation - listening for
maximum/minimum



Capillary Refill

- Ability of circulatory system to refill vessels at skin surface
- Two seconds or less
- Cold restricts it
- Nail bed, web of thumb, inside of lip



Skin Signs

- Temperature - cold, warm, hot
- Color - red, pink, pale, cyanotic
- Moisture - dry, moist, diaphoretic
- Normal is warm, pink and moist



Perfusion?

- What is perfusion?
- Why is it important?
- What does it require?



Shock?

- Big three causes?
- How much effective volume loss?



Signs of Circulatory Health?

- Pulses
- Blood pressure
- Capillary refill
- Skin signs



Pulses? Head to Foot.

- Carotid
- Radial
- Brachial - used most frequently with infants
- Femoral
- Posterior tibial
- Dorsalis pedis



Blood Pressure

- Systolic?
- Diastolic?
- How do we write it?



How Do We Take Blood Pressure?

- Measured by ..
- Two methods...
 - Palpation
 - Auscultation



Capillary Refill

- Ability of circulatory system
- How long?
- What about cold
- How do we check it?



Skin Signs

- What are the three signs
- Normal is?



Perfusion Is Basic

A patient without perfusion is not a
patient for long

© 2000, Tahoe Backcountry Ski Patrol. This OECTools.org document may be freely used, modified or copied for any non-profit purpose as long as this copyright notice is maintained.

Not reviewed by NSP. User has responsibility for determining fitness for use.