

Issue 9 September 2020

Health Education Collaborative Newsletter

A message from the CEO



Bruce Greaves
CEO/Director

Welcome to issue 9

It has been another tough month for Victorians with Covid 19 restrictions limiting all aspects of activity including work, education and socialisation (or should we say lack of socialisation).

I have been involved in the development and delivery of more training packages for Covid 19 PPE training into the aged care sector. The aim is to establish standardisation in infection prevention control (IPC) measures consistant with DHHS princilples and practice. This is a vital component in the ongoing battle against Covid 19 and any future pandemics we may face especially within the aged care sector. Ensuring staff are adequately trained to respond to an outbreak or a new pandemic is essential for safe care of residents and the broader community.

VACRC (Victorian Aged Care Respose Centre) who I have been faciliting training sessions for, recently introduced RACSOs (Residetial Aged Care Safety Officers. This cohort is made up of medical practitioners, nurses and other allied health professionals. Their role is to provide a set of eyes in aged care facilities to ensure that standards of IPC are being maintained and offer ongoing support to staff within the facility. This role is essential to assist in the prevention of further outbreaks within aged care facilities.

The good news is that numbers are looking very good and within a short while we should be back to what will become a Covid normal way of life.

Bruce Greaves CEO/Director Health Education Collaborative

Course Development

New courses

Due to the continuing Covid 19 lockdown, the Fracture Management course has been postponed until Thursday, 5 November 2020 (there are limited places remaining).

We pained over postponing this exciting course session for the second time but felt it was the right thing to do as we have several participants from regional Victoria and outside the 5 km limit.





Be the first in Australia to attain this endorsed certificate in fracture management: immobilisation, splinting and casting.

For further information and to enroll visit our website healthec.com.au

Clinical Update

Clinical Question

Last month's clinical question answer.



What is considered normal oxygen saturations for adults?

Hypoxemia is defined as an abnormally low level of oxygen in the blood. Hypoxia is defined as a condition where the oxygen supply is inadequate either to the body as a whole (general hypoxia) or to a specific region (tissue hypoxia). *Measures of oxygenation and mechanisms of hypoxemia, Arthur C Theodore MD, UpToDate.*

Marg Villella
Director/ Education
Director

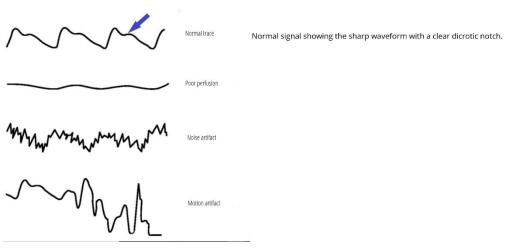
There is no set standard of oxygen saturation where hypoxemia occurs. The generally accepted standard is that a normal resting oxygen saturation of less than 95% is considered abnormal. Therefore, it remains vital to observe patients for the clinical markers of hypoxemia. The brain is the most sensitive organ, so observe for signs of confusion, agitation, restlessness, and anxiety.

The values should not be considered in isolation; trends in oxygen saturation and the underlying etiology are important for interpretation. For example:

- A resting SaO2 of 96% could be abnormal if a patient previously had a resting oxygen saturation of 99%.
- A target level of 88% to 92% may be sufficient in a patient with acute exacerbation of COPD.

What factors affect the accuracy of the reading?

Peripheral oxygen saturation can only be interpreted when the waveform is normal. A normal pulse oximeter waveform has a dicrotic notched appearance typical of an arterial waveform that coordinates with a palpable pulse.



Factors that may affect the accuracy of the reading

Improper probe placement

- Associated with the loss of amplitude of the waveform.
- Malposition or poor attachment can result in either a falsely elevated or depressed reading as light from only one the of two light sources passes through the skin.
- Many of these problems can be resolved by ensuring the probe is properly attached with the light sources and detectors opposite each other.
- Placement of the sensor on the same extremity as a blood pressure cuff can cause inaccurate readings and should be avoided.

Motion or noise artifact

- Can cause signal artifact and falsely lower oximetry readings
- Most commonly results from motion due to shivering, seizure activity or pressure on the sensor.

Hypoperfusion

Haemodynamic instability can cause falsely low pulse oximetry readings due to a poor signal. In adults, the accuracy of standard pulse oximeters decreases dramatically when systolic blood pressure falls below 80 mmHg.

Hypothermia

Hypothermia may interfere with pulse oximetry because of the associated peripheral vasoconstriction and shivering.

Nail polish

- Nail polish can potentially affect pulse oximeter readings if the polish absorbs light at 660 nm and/or 940 nm.
- Newer devices appear to be less affected with the greatest reductions in SpO₂ found in those with black or brown polish not exceeding 2 percent.
- Acrylic nails may also affect the accuracy of pulse oximetry readings.
- The problem may be avoided by mounting the probe on the finger sideways or using an alternative site such as the earlobe.

Carboxyhemoglobin

Carboxyhemoglobin absorbs light at 660 nanometers, which is roughly the same as oxyhemoglobin. Therefore, in situations where carboxyhemoglobin is high, a false normal reading may occur.

This month's clinical question.

What is the lowest oxygen flow rate you can set when administering oxygen via a simple face (Hudson) mask?

Next month I will tell you the answer to this and discuss different oxygen delivery devices and the FiO2 that can be delivered.

Events

Events

No events this month due to the ongoing Covid 19 restrictions.

If you would like us to present at any of your events, please contact us on info@healthec.com.au or phone Marg on 0419939458.

Collaborative Partnerships

Partner with us

Got an idea for a course or program?

Want to turn your academic research into a course?

Already have the material but not sure how to develop it and get it out there?

Want someone to develop a learning program for your organisation?

Then give us a call or contact us via our website to leave an expression of interest www.healthec.com.au

Next Issue: October 2020



Contact us:

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