

Dynamic Learning Exercise

Oxygen Administration

Instructor Notes: This exercise is designed to help your students make decisions about how and when to administer oxygen. Everyone wants a set “rule” but the AHA guidelines are combined with clinical judgment on a patient-by-patient basis. Be sure to encourage discussion. This is where learning takes place.

For each of the following patients, determine whether you would administer oxygen or not. If you choose to administer oxygen, choose an appropriate delivery device and flow rate. All patients in these scenarios are breathing adequately.

A 19-year-old male patient who broke his arm in a lacrosse game. He is in pain but conscious and alert.

This patient will likely not need oxygen at all.

A 74-year-old female patient who appears to have fallen and broken her hip. She is slightly confused. Her oxygen saturation is 95%.

The saturation of 95% seems adequate but the mental status is altered. A cannula may be appropriate but discuss other things that may cause confusion (e.g. hypothermia)

A 2-year-old patient with respiratory distress. The pediatrician believes it may be RSV. The child has suprasternal retractions and responds to her parents. You aren't confident in the pulse-ox reading which says 87%.

This patient needs oxygen. While it is a good sign that the child responds to the parents, oxygen remains appropriate. Blow-by may be the way to go here.

A 74-year-old woman is found by her daughter with slurred speech and facial asymmetry. She follows instructions. Her pulse oximetry reading is 98%.

In this suspected stroke scenario with a saturation of 98% oxygen isn't indicated. There are no other signs of distress.

Oxygen Administration (cont'd)

A 30-year-old male patient who is unresponsive after being ejected from a vehicle.

This patient will receive oxygen by non-rebreather mask. This patient likely has significant trauma and is unresponsive.

A 64-year-old male patient complains of substernal chest pain. His oxygen saturation is 93%

This patient would receive oxygen by nasal cannula. Since the saturation is below 94% some oxygen is appropriate. Begin with 2 lpm reminding students that they are only looking to titrate to 94%.

A high school football player is suspected of having a concussion after a hard hit. He is confused with an oxygen saturation of 99%.

This patient is saturating well and would not require oxygen. The confusion with a concussion isn't related to hypoxia.

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