Altered Level of Consciousness (ALOC) Protocol

A patient with an altered level of consciousness (ALOC) may present with a variety of symptoms from minor thought disturbances & confusion to complete unresponsiveness. The causes of ALOC include cardiac emergencies, hypoxia, hypoglycemia/diabetic emergencies, epilepsy/seizures, alcohol/drug related emergencies, trauma, sepsis, stroke or any other condition which disrupts brain perfusion.

ALOC can be the presenting symptom for many disease processes. Syncope is another type of ALOC and is characterized as an acute, temporary suspension of consciousness. Near-syncope (feeling faint) is a sensation of impending loss of consciousness that may rapidly progress to unconsciousness.

A patient who has experienced syncope or ALOC of any type should receive a thorough evaluation for secondary injuries (*e.g.* fall injuries associated with the ALOC) and for possible underlying causes. Although a patient's ALOC may be resolved in the field, the patient should still be strongly encouraged to accept EMS care and ambulance transport to the hospital for further evaluation.

First Responder Care

First Responder Care should be focused on assessing the situation and initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock.

1. Render initial care in accordance with the *Universal Patient Care Protocol*.

2. **Oxygen**: 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient cannot tolerate a mask.

3. **Oral Glucose**: 15g PO **if** the patient has a history of diabetes and has in possession a tube of Oral Glucose, is alert to verbal stimuli, is able to sit in an upright position, has good airway control and an intact gag reflex.

    - This applies to non-transporting BLS agencies **without** field medications also. All other BLS agencies should refer to the **BLS Care** section.

BLS Care

BLS Care should be directed at conducting a thorough patient assessment, initiating routine patient care to assure that the patient has a patent airway, is breathing and has a perfusing pulse as well as beginning treatment for shock and preparing the patient for or providing transport.

1. Render initial care in accordance with the *Universal Patient Care Protocol*.

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BLS Care (continued)

2. **Oxygen**: 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient does not tolerate a mask.

3. Perform **blood glucose level test**.

4. **Oral Glucose**: 15g PO if the patient's blood sugar is < 60mg/dL, the patient is alert to verbal stimuli, is able to sit in an upright position, has good airway control and has an intact gag reflex.

5. Perform a 2nd **blood glucose level test** to re-evaluate blood sugar 5 minutes after administration of Oral Glucose. If blood sugar remains < 60mg/dL, administer a 2nd dose of Oral Glucose (15g).

6. **Glucagon**: 1mg IM or (if available) 2mg IN if blood sugar is less than 60mg/dL, the patient is unresponsive and/or has questionable airway control or absent gag reflex.

7. **Narcan**: 2mg IN (1mg per nostril) using a mucosal atomizer device (MAD) if possible narcotic intoxication with respiratory depression (≤ 8 breaths per minute). May repeat 2mg IN if no response in 10 minutes.

8. Initiate ALS intercept if needed and transport as soon as possible.

9. Contact the receiving hospital as soon as possible.

ILS Care

ILS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Render initial care in accordance with the *Universal Patient Care Protocol*.

2. **Oxygen**: 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient does not tolerate a mask.

3. Perform **blood glucose level test**.

4. **Oral Glucose**: 15g PO if the patient's blood sugar is < 60mg/dL, the patient is alert to verbal stimuli, is able to sit in an upright position, has good airway control and has an intact gag reflex.

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ILS Care (continued)

Dextrose 50%: 25g IV if blood sugar is < 60mg/dL **or** 60-80mg/dL & patient is symptomatic.

Glucagon: 1mg IM or (if available) 2mg IN if blood sugar is less than 60mg/dL, the patient is unresponsive and/or has questionable airway control or absent gag reflex.

5. Perform a 2nd **blood glucose level test** to re-evaluate blood sugar 5 minutes after administration of Dextrose or Glucagon. Repeat Dextrose if BS is still < 60mg/dL.

6. **Narcan**: 2mg IV/IM if no response to Dextrose or Glucagon within 2 minutes. May repeat 2mg IV or IM if no response in ***5 minutes***.

   Narcan: 2mg IN if unable to establish IV access.

7. Obtain **12-Lead EKG** and transmit to receiving hospital if non-opiate overdose (or opiate overdose unresponsive to Narcan) or if cause of ALOC is uncertain.

8. Initiate ALS intercept if needed and transport as soon as possible.

9. Contact the receiving hospital as soon as possible or Medical Control if necessary.

ALS Care

ALS Care should be directed at continuing or establishing care, conducting a thorough patient assessment, stabilizing the patient's perfusion and preparing for or providing patient transport.

1. Render initial care in accordance with the *Universal Patient Care Protocol*.

2. **Oxygen**: 15 L/min via non-rebreather mask or 6 L/min via nasal cannula if the patient does not tolerate a mask.

3. Perform **blood glucose level test**.

4. **Oral Glucose**: 15g PO if the patient's blood sugar is < 60mg/dL, the patient is alert to verbal stimuli, is able to sit in an upright position, has good airway control and has an intact gag reflex.

   Dextrose 50%: 25g IV if blood sugar is < 60mg/dL **or** 60-80mg/dL & patient is symptomatic.

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ALS Care (continued)

Glucagon: 1mg IM or (if available) 2mg IN if blood sugar is less than 60mg/dL, the patient is unresponsive and/or has questionable airway control or absent gag reflex.

5. Perform a 2nd **blood glucose level test** to re-evaluate blood sugar 5 minutes after administration of Dextrose or Glucagon. Repeat Dextrose if BS is < 60mg/dL.

6. **Narcan**: 2mg IV/IM if no response to Dextrose or Glucagon within 2 minutes. May repeat 2mg IV or IM if no response in ***5 minutes***.

   Narcan: 2mg IN if unable to establish IV access.

7. Obtain **12-Lead EKG** and transmit to receiving hospital if non-opiate overdose (or opiate overdose unresponsive to Narcan) or if cause of ALOC is uncertain.

8. Transport and conatact receiving hospital as soon as possible.

Critical Thinking Elements

- Look for Medic Alert tags.
- Consider possible C-spine injury and follow C-spine precautions as necessary.
- Be prepared for possible vomiting after administration of Glucagon.
- Vitals and GCS should be recorded every 5 minutes.
- After administration of Dextrose, allow 2 minutes before administration of Narcan.
- No intercept is required if the patient becomes alert/oriented after the administration of Oral Glucose or Glucagon unless the patient has a condition that warrants intercept.
- Signs/symptoms of hypoglycemia include: Weakness/shakiness, tachycardia, cold/clammy skin, headache, irritability, ALOC/bizarre behavior or unresponsive.
- No 12-Lead EKG is necessary for known etiologies such as hypoglycemia, opiate overdose responsive to Narcan or febrile illness.
- ILS / ALS: If a patient refuses transport after administration of D_{50} (& is CA+Ox3), the call may be treated as a low risk refusal as long as the following criteria are met (and documented in the PCR):
  - The cause of the patient's hypoglycemia can be easily explained (*e.g.* patient took insulin but did not eat).
  - The patient has no other complaints and no other issues are identified after a thorough evaluation (including a full assessment, vitals and repeat blood sugar).
  - EMS advises patient/family that the patient needs to consume foods containing complex carbohydrates & protein within the next 15 minutes (assist patient if needed prior to departing the scene).