

FIRST CARE PROVIDER

10. Analgesia

- a. If possible, provide analgesia as needed. Adequate pain control can reduce physiologic stress, may decrease post-traumatic stress, and may help to prevent chronic pain syndromes.
- b. Non-pharmacologic interventions such ice, elevation and immobilization may be effective.
- c. Acetaminophen can provide effective pain control if person is not vomiting and can swallow. Avoid the use of traditional non-steroidal anti-inflammatory medications (e.g. aspirin, ibuprofen, naproxen) in the trauma patient as these medications interfere with platelet functioning and may exacerbate bleeding.

FIRST RESPONDER WITH DUTY TO ACT

Direct Threat/Hot Zone: No change

Indirect Threat/Warm Zone:

10. Analgesia

- a. If possible, provide analgesia as necessary for the patient. Adequate pain control can reduce physiologic stress, may decrease post-traumatic stress, and may help to prevent chronic pain syndromes.
 - i. For mild - moderate pain:
 - Immobilization of a wounded extremity may be effective as the initial intervention.
 - Consider oral acetaminophen if the patient is not vomiting and can swallow. Avoid the use of traditional non-steroidal anti-inflammatory medications (e.g. aspirin, ibuprofen, naproxen, ketorolac, etc) in the trauma patient as these medications interfere with platelet functioning and may exacerbate bleeding. Celecoxib, a selective Cox-2 inhibitor, has no effect on platelets and may also be considered as a non-sedating oral analgesic.

Evacuation Care / Cold Zone:

11. Analgesia

- a. Provide analgesia as necessary for the patient. Adequate pain control can reduce physiologic stress, may decrease post-traumatic stress, and may help to prevent chronic pain syndromes.
 - i. Non-pharmacologic interventions such ice, elevation and immobilization may be effective as the initial intervention.
 - ii. Consider oral non-narcotic medications if the patient is not vomiting and can swallow. Acetaminophen can provide effective pain control.

Avoid the use of traditional non-steroidal anti-inflammatory medications (e.g. aspirin, ibuprofen, naproxen, ketorolac, etc) in the trauma patient as these medications interfere with platelet functioning and may exacerbate bleeding. Celecoxib, a selective Cox-2 inhibitor, has no effect on platelets and may be considered as a non-sedating oral analgesic.

ALS/BLS PROVIDERS

Direct Threat / Hot Zone: No change

Indirect Threat Care / Warm Zone:

10. Analgesia

- a. Provide adequate analgesia as necessary for the patient. Adequate pain control can reduce physiologic stress, may decrease post-traumatic stress, and may help to prevent chronic pain syndromes.
 - i. For mild - moderate pain:
 - Immobilization may be effective as the initial intervention.
 - Consider oral non-narcotic medications. Avoid the use of traditional non-steroidal anti-inflammatory medications (e.g. aspirin, ibuprofen, naproxen, ketorolac, etc) in the trauma patient as these medications interfere with platelet functioning and may exacerbate bleeding. Celecoxib, a selective Cox-2 inhibitor, has no effect on platelets and may be considered as a non-sedating oral analgesic.
 - Acetaminophen, either oral or intravenous, can provide effective pain control especially when combined with other non-narcotic medications such as celecoxib.
 - ii. For moderate – severe pain:
 - Consider use of narcotic medications (hydrocodone, oxycodone, fentanyl, etc.) The side effect profile for narcotics requires careful titration and increased monitoring for adverse effects such as respiratory depression or hypotension. Weigh the benefits of opioid pain control versus the operational effect of opioid-induced altered mental status on subsequent operations and the need for required resources to manage these patients. Have naloxone readily available whenever administering opiates.
 - Consider the use of Ketamine at analgesic dosages (up to 1mg/kg). Ketamine may be administered by any route, although the dosing changes depending on the exact administration route. When used as a single agent, ketamine does not induce hypotension or respiratory depression therefore requires less

monitoring. Consider initial dose of 25-50 mg IV, IM or IN titrated every 15 min until pain control. Low dose benzodiazepam may be added for subsequent dysphoria.

- Strong consideration should be given to administering analgesia using a multi-modal approach to pain control. By using analgesics with different, but potentiating, mechanisms of action, lower doses and therefore less side effects may be used with the same or better pain control than using a single modality alone. For example, combining low dose fentanyl, ketamine, and acetaminophen together may give superior analgesia with less respiratory depression and hypotension.
- Anti-emetic medications should be co-administered with pain medications.

Evacuation Care / Cold Zone

10. Analgesia

- a. Provide adequate analgesia as necessary for the patient. Adequate pain control can reduce physiologic stress, may decrease post-traumatic stress, and may help to prevent chronic pain syndromes.

- iii. For mild - moderate pain:

- Non-pharmacologic interventions such as ice, elevation and immobilization may be effective as the initial intervention.
- Consider oral non-narcotic medications. Avoid the use of traditional non-steroidal anti-inflammatory medications (e.g. aspirin, ibuprofen, naproxen, ketorolac, etc) in the trauma patient as these medications interfere with platelet functioning and may exacerbate bleeding. Celecoxib, a selective Cox-2 inhibitor, has no effect on platelets and may be considered as a non-sedating oral analgesic.
- Acetaminophen, either oral or intravenous, can provide effective pain control especially when combined with other non-narcotic medications such as celecoxib.

- iv. For moderate – severe pain:

- Consider use of narcotic medications (hydrocodone, oxycodone, fentanyl, etc.) The side effect profile for narcotics requires careful titration and increased monitoring for adverse effects such as respiratory depression or hypotension. Have naloxone readily available whenever administering opiates. Weigh the benefits of opioid pain control versus the operational effect of opioid-induced altered mental status on subsequent operations and the need for required resources to manage these patients.
- Consider the use of Ketamine at analgesic dosages (up to 1mg/kg). Ketamine may be administered by any route, although

the dosing changes depending on the exact administration route. As a sympathetic mimic, ketamine does not induce hypotension or respiratory depression when used as single agent therefore requires less monitoring. Doses should be titrated starting at 25-50 mg IV, IM or IN titrated every 15 min until pain control. Consider adding low dose benzodiazepam for dysphoria.

- Strong consideration should be given to administering analgesia using a multi-modal approach to pain control. By using analgesics with different, but potentiating, mechanisms of action, lower doses and therefore less side effects may be used with the same or better pain control than using a single modality alone. For example, combining low dose fentanyl, ketamine, and acetaminophen together may give superior analgesia without the side effects of respiratory depression and hypotension.
- Anti-emetic medications should be co-administered with pain medications.
- With proper training and under proper scope of practice, peripheral nerve blocks (wrist, ankle, digit) can be considered for excellent pain control without causing respiratory depression or change in mentation.