Chemical Sedation for the Agitated and Delirious Patient

Indication: Sedation of patients who cannot be verbally deescalated and require transport for medical or psychiatric evaluation, who (in the judgment of the paramedic) pose a risk to themselves, the general public, or the EMS provider.

B

Assess ABC's. Obtain vital signs and blood glucose.

Consider causes of altered mentation (e.g. hypoxia, overdose, toxic ingestion, traumatic brain injury, multisystem trauma, etc.) and attempt to treat reversible causes.

Ensure the scene is safe and assemble adequate number of personnel to manage the patient. Consider the need for law enforcement.

Make reasonable attempt to address patient concerns and attempt verbal deescalation.

Consider **Restraint Guideline**. **Never hogtie a patient or transport in the prone position.** The patient must be properly seatbelted without handucffs during transport.

Closely monitor airway, SpO_2, vital signs, and $EtCO_2$ throughout transport.

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Consider IV/IO access.

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Consider chemical sedation using Behavioral Severity Index (BSI) guidelines below:

Level	Item	Description
1	**Confused**	Appears obviously confused and disoriented. May be unaware of time, place, or person.
2	**Irritable**	Easily annoyed or angered. Unable to tolerate the presence of others.
3	**Boisterous**	Behavior is overtly "loud" or noisy. *e.g. Slams doors, shouts out when talking etc.*
4	**Verbally Threatening**	A verbal outburst which is more than just a raise voice, and where there is a definite intent to intimidate or threaten another person. *e.g. Verbal attacks, abuse, name-calling, verbally comments uttered in a snarling aggressive manner.*
5	**Physically Threatening**	Where there is a definite intent to physically threaten another person. *e.g. Aggressive stance, grabbing another person's clothing, raising of an arm or leg, making of a fist or modeling of a head-butt directed at another*
6	**Attacking Objects**	An attack directed at an object and not an individual. *e.g. Indiscriminate throwing of an object, banging or smashing windows, kicking, banging or head-butting an object, or the smashing of furniture.*
7	**Attacking People**	Any physical assault on another person or persons. *e.g. Kicking, punching, striking, biting, throwing objects at a specific living target, brandishing or use of any object as a weapon.*

Level	Approved Interventions *The interventions listed at each BSI level represent the **MAXIMUM** intervention allowed. Providers may use their discretion to apply interventions listed in lower-acuity BSI levels but may not exceed the recommended interventions for the highest-acuity classification the patient meets.*
0	**Keep patient informed of plan of care and involved in decision making.**
1-3	**Coaching, reassurance, or verbal de-escalation** ***- AND, IF NEEDED -*** **MIDAZOLAM** **Intramuscular:** 2.5 - 5mg once. Reassess after 10 minutes, and consider administering an additional 5mg IM, if necessary. **Intravenous / Intraosseous:** 1.0 - 2.5mg once. Reassess after 5 minutes, and consider administering an additional 2.5mg IV, if necessary. **- PLUS - All gurney seatbelts with buckle guards**
4-5	**MIDAZOLAM** **Intramuscular:** 5-10mg once. Reassess after 3 minutes, and consider administering another 5mg IM q3 min to maximum of 20mg. **Intravenous / Intraosseous:** 2.5 - 5.0mg once. Reassess after 1 minute, and consider administering an additional 2.5mg IV, if necessary. **- PLUS - All gurney seatbelts with buckle guards AND limb restraints x4**
6-7	**MIDAZOLAM** **Intramuscular:** 5-10mg once. Reassess after 3 minutes, and consider administering another 5mg IM q3 min to maximum of 20mg. **Intravenous / Intraosseous:** 2.5 - 5.0mg once. Reassess after 1 minute, and consider administering an additional 2.5mg IV, if necessary. **- PLUS - All gurney seatbelts with buckle guards AND limb restraints x4** **OR** **If BSI Score of 6-7 WITH Signs of Excited Delirium*:** *A state of psychomotor agitation and/or dissociation from reality that is **immediately threatening to the patient, general public, or EMS provider's well-being**. Defined by clinical features, such as paranoia, hyperaggression, violence, hallucinations, sympathetic tone (e.g. tachycardia, hypertension, hyperthermia, increased strength). Frequently associated with stimulant / sympathomimetic drug use. **Consider:** **KETAMINE (***AAS PARAMEDIC ONLY***)** **Intramuscular:** 4mg/kg once, to maximum of 500mg. *Goal is rapid tranquilization to minimize time struggling with patient. Beware of overdoses that may occur when the dosing weight is overestimated. Providers should agree on best estimate of weight.* **Close monitoring for vocal cord spasm (e.g. new onset stridor, loss of $EtCO_2$ waveform).** **If hypersecretion present:** Atropine 0.1–0.3 mg IV/IO or 0.5 mg IM **If hyperthermia present:** Consider external cooling. **If emergence reaction occurs:** Midazolam 2.5mg IV/IO. May repeat every 3 minutes, as necessary. Midazolam 5mg IM. May repeat every 5 minutes, as necessary. **If wide-complex tachycardia:** Sodium Bicarbonate 1 mEq/kg (max of 100 mEq)

EtCO2 monitoring is mandatory with any use of midazolam or ketamine.

On reassessment between doses of Midazolam, if the patient demonstrates rapidly increasing violence or aggression and signs of excited delirium*, consider escalating to Ketamine administration.

POST-SEDATION:

Establish IV access.

Consider 500mL fluid boluses as needed, to maximum of 2L.

Continuous cardiac monitoring.

Obtain 12-lead ECG.

Inappropriate or unjustified use of either physical restraint or chemical sedation for the purposes of restraint may be considered an infringement on the patient's civil rights.

EMS providers may not restrain or sedate a patient for law enforcement purposes alone.

EMS providers must use discretion when restraining a patient against their will, and should completely document their assessment and rationale for their actions.

Severe Alcohol Withdrawal / Delirium Tremens:

Patients may be severely agitated: Withdrawal symptoms often begin within 6-24 hours of last drink. Delirium tremens will usually manifest within 48-72h from last drink.

Benzodiazepines and fluids are the mainstay of treatment for these patients.