Anxiolysis (Minimal Sedation) for Procedures and Tests

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson’s specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient’s care. This algorithm should not be used to treat pregnant women.

Note: Refer to Anxiolysis (Minimal Sedation) for Procedures Policy (#CLN0502) for complete information.

**ASSESSMENT**

Patient needs anxiolysis based on assessment?

- Yes
- No

**PRE-PROCEDURE**

Prior to administering anxiolysis
- Follow institutional processes for reviewing plan for anxiolysis with patient
- Obtain and document baseline vital signs
- Provider to review patient’s allergy and medication history, vital signs, assess level of consciousness (LOC), orientation level, and determine appropriate medication and dose based on onset of action (see charts below) of anxiolysis for desired patient response
- If indicated, nurse to assess and document baseline vital signs, LOC, orientation level and review patient’s allergy and medication history prior to administering anxiolysis

**INTRA-PROCEDURE**

Continue with procedure and assess as clinically indicated

**POST-PROCEDURE**

- For patient who received anxiolysis, assess LOC, orientation level and vital signs
- Discharge patient when clinically stable and follow institutional processes regarding discharge instructions and criteria for both inpatient and outpatient settings

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**Adult Recommended Anxiolysis Dosing**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Adult Dose</th>
<th>Route</th>
<th>Onset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midazolam</td>
<td>2.5 - 10 mg</td>
<td>PO</td>
<td>10-30 minutes</td>
</tr>
<tr>
<td>Lorazepam</td>
<td>0.5 - 2 mg</td>
<td>PO, IM</td>
<td>30-60 minutes</td>
</tr>
<tr>
<td></td>
<td>0.5 - 2 mg</td>
<td></td>
<td>20-30 minutes</td>
</tr>
<tr>
<td>Diazepam</td>
<td>5 - 10 mg</td>
<td>PO</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Alprazolam</td>
<td>0.25 - 0.5 mg</td>
<td>PO</td>
<td>60 minutes</td>
</tr>
</tbody>
</table>

**Pediatric Recommended Anxiolysis Dosing**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Pediatric Dose</th>
<th>Route</th>
<th>Onset</th>
<th>Maximum per Dose</th>
<th>Maximum number of Doses prior to Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midazolam</td>
<td>&gt; 6 months to &lt; 6 years: 0.25 - 1 mg/kg/dose</td>
<td>PO</td>
<td>10-20 minutes</td>
<td>5 mg/dose</td>
<td>&lt; 15 kg: Two 5 mg doses (maximum 10 mg total)</td>
</tr>
<tr>
<td></td>
<td>6 years and older: 0.25 - 0.5 mg/kg/dose</td>
<td>PO</td>
<td>10-20 minutes</td>
<td>5 mg/dose</td>
<td>15-30 kg: Three 5 mg doses (maximum 15 mg total)</td>
</tr>
</tbody>
</table>

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1. If an admitted patient receives a dose of IV benzodiazepine for anxiolytic purposes within 30 minutes of a procedure or test, it is recommended that the patient is monitored according to standards
2. Dosing adjustments: use lower doses for patients > 60 years, debilitated patients, hepatic or renal impairment, and in combination with narcotics or with other central nervous system (CNS) depressants
3. Flumazenil is available for patients requiring reversal of anxiolytics
4. Midazolam is preferred due to shorter half-life
5. Pediatric resuscitative equipment should be available or easily accessible
6. Pediatric considerations:
   - Consider lower dose of dosing range for patients with cardiac or respiratory compromise, and those who received concomitant opiates, benzodiazepines or similar synergistic sedative medications
   - May repeat if adequate response is not achieved

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Department of Clinical Effectiveness V5
Approved by the Executive Committee of the Medical Staff on 01/17/2023
**SUGGESTED READINGS**


This practice consensus statement is based on majority opinion of the Anxiolysis experts at the University of Texas MD Anderson Cancer Center for the patient population. These experts included:

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