PACU Discharge and Bypass Criteria

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Definition

- Determining appropriate recovery from an operation is standardized to assure quality of care and allow for nursing independence.

- Phase I (recovers from anesthesia, protective reflexes return, motor function returns) and II (achieves criteria for discharge, coordinated, ambulating and judged to be home ready) are standard PACU recovery terms. Fully recovered – happens later when they return to preoperative physiological and functional state.

- Bypassing phase I is considered fast tracking. Based on criteria. Incurs cost saving, increases patient satisfaction and is possible with advent of anesthetic agents to facilitate early recovery.

- More complex ambulatory procedures are being performed on sicker patients with an increased emphasis on early discharge. Important to do this safely.
Discharge from Phase I

- Aldrete’s original scoring system was originally described in 1970.
- Requires a score of 9 or greater to leave the PACU (out of total of 10) to move from Phase I.
- Has been modified to include SpO2 rather than “color”
Activity

- Able to move four extremities on command: 2
- Able to move two extremities on command: 1
- Able to move 0 extremities on command: 0
Breathing

- Able to breathe deeply and cough freely: 2
- Dyspnea: 1
- Apnea: 0
Circulation

- BP less than 20% of preanesthetic level: 2
- BP is 20%-49% of the preanesthetic level: 1
- BP greater than 50% of preanesthetic level: 0
Consciousness

- Fully awake: 2
- Arousable: 1
- Not responding: 0
Oxygen Saturation (pulse oximetry)

- 92% while breathing room air: 2
- Needs supplemental oxygen to maintain saturation > 90%: 1
- Below 90% even with supplemental oxygen: 0

This is the modification to the Aldrete scoring. The original just accounted for “color”. Occurred with the advent of the pulse oximetry.
Fast tracking

- With the increase in ambulatory anesthesia there was a need to revise the Modified Aldrete scoring to allow for fast tracking.

- More criteria added to ensure “street fit” since many who passed the Modified Aldrete Scoring required pain meds and anti-nausea meds.

- White scoring was created to help determine phase II fast tracking.
## White Scoring System

<table>
<thead>
<tr>
<th>Level Of Consciousness</th>
<th>Oxygen saturation status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awake &amp; oriented</td>
<td>Maintains &gt;90% on RA</td>
</tr>
<tr>
<td>Arousable w/min stimulation</td>
<td>Requires nasal prongs</td>
</tr>
<tr>
<td>Responsive only to tactile</td>
<td>Sat &lt;90% with O2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Activity</th>
<th>Post-operative Pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able to move all 4 ext</td>
<td>None or mild</td>
</tr>
<tr>
<td>Some weakness</td>
<td>Mod to severe, IV meds</td>
</tr>
<tr>
<td>Unable to voluntarily move</td>
<td>Persistent severe pain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hemodynamic Stability</th>
<th>Postoperative Emetic symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP &lt;15% baseline MAP</td>
<td>None or mild with no active vomiting</td>
</tr>
<tr>
<td>BP 15-30% of baseline MAP</td>
<td>Transient vomiting or retching</td>
</tr>
<tr>
<td>BP &gt;30% below baseline MAP</td>
<td>Persistent mod to severe nausea and vomiting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Respiratory stability</th>
<th>TOTAL SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able to breathe deeply</td>
<td>14</td>
</tr>
<tr>
<td>Tachypnea w/good cough</td>
<td>Minimal score of 12, with no category &lt;1</td>
</tr>
<tr>
<td>Dyspnea w/ weak cough</td>
<td>required for fast-tracking</td>
</tr>
</tbody>
</table>

Minimal score of 12, with no category <1 required for fast-tracking
Modified PADSS – Home readiness

- Post Anesthesia Discharge Scoring System – based on 5 criteria.
- Patients who score of 9 or greater and have an appropriate escort are ready to go home.
- Discharge if released home to a responsible adult.
- This is discharge from phase II – could be a separate unit but it is the same at Stanford. Most value if it is in a stepdown unit.
- Modified because took away requirement to have PO intake and voiding.
Vital Signs

- BP and HR within 20% of preanesthetic level: 2
- BP and HR 20%-40% of the preanesthetic level: 1
- BP and HR > 40% of the preanesthetic level: 0
Activity

- Steady gait without dizziness or meets the preanesthetic level: 2
- Requires assistance: 1
- Unable to ambulate: 0
Nausea and Vomiting

- None to minimal, successfully treated with meds: 2
- Moderate successfully treated with IM meds: 1
- Severe, continues despite meds: 0
Surgical Bleeding

- Consistent with that expected for the surgical procedure
- Minimal (does not require dressing change): 2
- Moderate (up to two dressing changes required): 1
- Severe (more than three dressing changes required): 0
Pain

- Pain acceptable: 2
- Pain not acceptable: 1
Voiding

- Routine requirement is not necessary for discharge.
- Instructions are important
Factors that Delay Discharge

- Dizziness
- PONV
- Pain
- CV event (HTN)
- Drowsiness
- Shivering
Question #1

Which scoring system includes heart rate:

A. Modified Aldrete
B. Aldrete
C. Modified PADSS
D. White
Answer #1

- Modified PADSS includes criteria for HR. Others only include BP.
The concept of fast tracking involves which of the following:

A. Decreasing length of stay in Phase I by transitioning to Phase II early
B. Bypassing Phase I and admitting patients from OR to phase II
C. Discharging patients home from Phase II
D. Allowing patients to go home on the same day of surgery
E. Allowing patients who have had a MAC to transition to recovery phases faster than undergoing a general anesthesia
Answer #2

• B

• Suitable for fast tracking past labor intensive Phase I to Phase II

• Overall stay in recovery shorter because of skipping Phase I

• Fast track is possible both for MAC and general anesthesia patients.
Question #3

Patient is a 52 year old female s/p laparoscopic left inguinal hernia repair. PMH: HTN (baseline BP 136/92) for which she takes metoprolol (baseline HR 64). She arrives into recovery. VS: HR 71 BP 140/80 RR 18 Sp02 98% on 3L NC. She is awake and after a big cough states she has no pain. She can wiggle his toes and fingers and gives you a thumbs up. What is her Aldrete Score:

A. 5
B. 8
C. 9
D. 10
E. Unable to determine
Answer #3

- C

- One point lost for NC to maintain O2sat > 90%

- She appears to be even fast track eligible although we don’t know exactly her nausea score. Can’t determine White score
References