Authorizing physician(s)

Anesthetists, Lakeridge Health Oshawa, Department of Anesthesia. The authorizing Anesthetists are accountable to assess the ability of the Anesthesia Assistant to use appropriate knowledge, skill and judgment to implement the medical directive.

Authorized to who

Designated Anesthesia Assistants who work within the surgical program throughout Lakeridge Health Corporation and who have the following qualifications:

- Registration with the College of Respiratory Therapists of Ontario (CRTO) or Registration with the College of Nurses of Ontario (CNO)
- Completion of the Post Graduate Anesthesia Assistant Certificate Program at the Michener Institute.
- Current in ACLS (i.e. certification within the last 2 years)
- Competent to perform intravenous and arterial line insertions.
- Competent to perform endotracheal intubation, laryngeal mask insertion, and extubation.

Patient Description / Population

This medical directive applies to patients 16 years of age and older.

Medical Directive Description/Physician’s Order

The Anesthesia Assistant can implement the medical directive for the Management of Intravenous Fluid for patients receiving general, regional, local anesthesia, or conscious sedation who are under the supervision of an attending anesthetist.

Specific conditions/circumstances that must be met before the Directive can be implemented

The Anesthesia Assistant can implement the medical directive for patients with an American Society of Anesthesiology (ASA) class score of I-V who have been deemed by the attending Anesthetist to be candidates for the monitoring of general or regional anesthesia by Anesthesia Assistants or the provision of conscious sedation by an Anesthesia Assistant.

The directive should be implemented for all surgical patients needing an intravenous catheter.
Contraindications to the implementation of the Directive

Patients who are deemed to be unstable by the Anesthesiologist.

Identify relevant Delegated Control Act or Added Skill associated with this Directive

Controlled Act 5 - Administering a substance by injection or inhalation.

Documentation requirements

Document on Anesthesia Record Sheet.

Review/Evaluation Process (how often/by who)

The Medical Directives for the Management of Intravenous Fluid by Anesthesia Assistants should be reviewed annually to ensure the following: current content, appropriateness of use and updating of physician and staff authorization lists. It is the responsibility of the Department of Anesthesia members to monitor quality issues associated with medical directive implementation.

Related Documents

Appendix A

American Society of Anesthesiologists (ASA) Classification

<table>
<thead>
<tr>
<th>Status</th>
<th>Disease State</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASA Class I</td>
<td>No organic, physiologic, biochemical, or psychiatric disturbance</td>
</tr>
<tr>
<td>ASA Class II</td>
<td>Mild to moderate systemic disturbance that may or may not be related to the reason for surgery</td>
</tr>
<tr>
<td>ASA Class III</td>
<td>Severe systemic disturbance that may or may not be related to the reason for surgery</td>
</tr>
<tr>
<td>ASA Class IV</td>
<td>Severe systemic disturbance that is life-threatening with or without surgery</td>
</tr>
<tr>
<td>ASA Class V</td>
<td>Moribund patient who has little chance of survival but is submitted to surgery as a last resort (resuscitative effort)</td>
</tr>
<tr>
<td>Emergency operation (E)</td>
<td>Any patient in whom an emergency operation is required</td>
</tr>
</tbody>
</table>

Anesthesiology 1963; 24:111
Appendix B

Intervention Tree for the Management of Fluid for Patients Undergoing General/Regional Anesthesia or Conscious Sedation with Monitoring provided by Anesthesia Assistants

INTRAOPERATIVE IV FLUID REPLACEMENT THERAPY

MAINTENANCE
Needed for urine formation, gastrointestinal secretion, sweating, and insensible losses from the skin and lungs

IV FLUID SHIFT
Third space loss (shift due to evaporation and internal redistribution of body fluid)

- Minor shift: 2 – 4 mL/kg/hr
- Moderate shift: 4 – 8 mL/kg/hr
- Major shift: 8 – 12 mL/kg/hr

PREOPERATIVE DEFICITS
Attempt to replace what is loss preoperative from bowel prep, fasting, NPO status. Compensation is made for 10X hourly maintenance

CALCULATE AND REPLACE WITH ISOTONIC CRYSTALLOIDS
Use ½ the calculated deficit with the elderly and patients with renal, cardiac and hepatic disorders.

MONITOR REVEALS ADEQUATE HR AND BP (URINE OUTPUT GREATER THAN 0.5 mL/hr)
CONTINUE WITH IV FLUID REPLACEMENT THERAPY AND MONITOR

MONITOR REVEALS TACHYCARDIA AND DECREASED BP (URINE OUTPUT LESSER THAN 0.5 mL/hr)
RESPONS
BOLUS 250 mL of Isotonic Crystalloids IV x 1 dose

CALL ATTENDING ANESTHETIST

SEE TACHYCARDIA AND HYPO TENSION MEDICAL DIRECTIVES

TACHYCARDIA AND DECREASED BP PERSISTS

DOES NOT RESPOND
Medical Directive: Management of Intravenous Fluid Therapy by Anesthesia Assistants

References

Respiratory Therapy Act, 1991


Public Hospital Act, R.R.O. 1990

College of Respiratory Therapists of Ontario (CRTO), Interpretation of authorized acts, May 1999

The Controlled Acts Model Regulated Health Professions Act (1991)

Anesthesiology 1963; 24:111


Mark R. Ezekiel, MD, MS Anesthesiology 1999-2000 edition
Medical Directive: Management of Intravenous Fluid Therapy by Anesthesia Assistants

| Developed by: | Don Charkavi, Anesthesia Assistants | Name | Surgical Program |
| | Angella McDonald | Position/Title | Program |
| | Diane McRae | | |

| Main Contact: | Dr. J. Maybee, Chief of Anesthesia | Name | Surgical Program |
| | | Position/Title | Program |

| Contact: | Leslie Motz, Director | Name | Surgical Program |
| | | Position/Title | Program |

| Authorized by: | Anesthetists, LHO, Dept of Anesthesia, June – August 2011 | Name | Date |
| | Physicians | | |

| Approvals and Signatures: (Original signatures document available in Medical Affairs Office) |
|---|---|---|---|
| Department Chief: | Dr. John Maybee | Name | Sept 14, 2011 |
| Medical Director: | Vacant | Name | |
| Program Director: | Leslie Motz | Name | Sept 14, 2011 |
| Chair of Inter-Professional Advisory Comm.: | Sherida Chambers | Name | Sept 21, 2011 |
| Chair of CNAC: | Sherida Chambers | Name | Sept 21, 2011 |
| Chair of P & T Comm: | Dr. Ilan Lenga | Name | August 9, 2011 |
| Final Approval Chair of MAC: | Dr. Murray Treloar | Name | Sept 8, 2011 |