Health

**TUBE FEEDING**

1. **Purpose:** To ensure optimal nutritional level for Florida State Hospital residents in the least invasive manner possible.

2. **Scope:** Residents who are unable to maintain adequate nutritional status with oral feedings.

3. **Training Requirements:** Physicians, Advanced Registered Nurse Practitioners, and nurses will be trained on this operating procedure upon hire into the position during Worksite Education and by their supervisor each time the operating procedure is revised.

4. **Procedure:**

   a. Procedure for placing residents on tube feedings.

      (1) Residents whose oral intake is not adequate for their nutritional needs will be reviewed and evaluated by the Recovery Team, which must include the attending physician and dietitian. Causative factors including psychiatric problems will be addressed and documented. Interventions will be documented on the resident's Recovery Plan. Causative factors and interventions will be clearly summarized in the progress notes. The Recovery Team decision will be documented in the progress notes. Residents who have a feeding tube in place at the time of admission or transfer to Florida State Hospital will be reviewed by the Medical Service Director and the Recovery Team for continuation of feeding by tube.

      (2) The attending physician will review the Advance Directives and will make recommendations to implement oral feedings or recommend nasogastric tube (NGT) feeding.

      (3) Residents on nasogastric tube feedings will be re-evaluated at regularly scheduled team meetings for consideration of surgical tube placement.

      (4) Whenever the Recovery Team determines that surgical tube feeding is necessary, the attending physician will complete Section I of Form 581, Approval Form for Enteral Feedings. (See Attachment 1)

      (5) If a problem with swallowing or oral motor deficiency is suspected by the Recovery Team or clinical staff member, The Recovery Team Leader will initiate a consultation from either a speech pathologist, occupational therapist or ENT specialist, who is knowledgeable in the pathophysiology and management of this disorder to determine the resident's restorative potential.

This Operating Procedure supersedes: Operating Procedure 150-15, dated September 25, 2007

**Office of Primary Responsibility:** Health Care Medical Service Director

**Distribution:** Florida State Hospital Computer Network Users
(6) If the problem is more than a functional swallowing disorder, the attending physician will obtain consultation from a board certified Gastroenterologist/Surgeon about the need for gastrostomy/jejunostomy tube.

(7) The head of the Clinical Dietary Department will also be consulted for recommendations.

(8) The Social Worker will obtain input from the resident, if possible, and family/guardian and document the information obtained on Form 581.

(9) The Hospital Health Care Medical Service Director will be consulted when a consent is obtained.

(10) The Recovery Team Leader will complete Section VII of Form 581 and send it to the Hospital Clinical Director.

(11) The Hospital Clinical Director will approve/disapprove the procedure by completing Form 581, Section VIII.

(12) If at any point there is disagreement between the Consultant, Physicians and Recovery Team that surgical tube feeding placement is necessary, the Health Care Medical Service Director will meet with the team members to mediate any disagreement and coordinate a plan of care for feeding.

(13) If all parties agree that surgical tube feeding placement is necessary, the team physician and Health Care Medical Service Director will choose the most beneficial type of tube feeding.

(14) In the event of more urgent requirements for supplemental feeding, the physician may initiate nasogastric tube feedings and get permission from resident/family/guardian and begin the process described above within thirty (30) days.

(15) If the resident who receives a feeding tube is on oral phenytoin, Attachment 2 (Interaction of Oral Phenytoin With Enteral Tube Feedings) of this operating procedure will be followed. It is important to note that prior to starting enteral feedings, a baseline phenytoin level will be obtained.

b. Procedure related to maintenance of tube feedings.

(1) The head of the bed will be elevated at least 30° - 45° angle at all times unless ordered otherwise by the physician. A sign designating the elevation of the head of the bed will be placed on the wall at the head of the bed.

(2) All gastrostomy tubes should not be changed unless the following conditions exist:

   (a) the tube is not patent;

   (b) obvious deterioration in the material, breakdown, or leakage of the tube;

   (c) the tube is completely non-functional; or
(d) medical condition dictates the removal of the tube, i.e. GI bleeding or intestinal obstruction, etc.

(3) Do not inflate or deflate the balloon on the Gastrostomy tube unless the tube is being prepared for changing and the replacement tube is present at the bedside at the time the tube is deflated.

(4) Gastrostomy tubes may be changed every four (4) to six (6) months or otherwise as needed based on the indications in paragraph 4b(2) above. There is no need to change tubes every two (2) to three (3) months or any interval less frequent than 4-6 months.

(5) In the event that a resident's gastrostomy or jejunostomy tube meets the criteria in paragraph 4b(2) above within six (6) weeks post-insertion by a gastroenterologist/surgeon, the resident will be referred to the gastroenterologist/surgeon who inserted the tube. A tube especially designed for gastrostomy or jejunostomy feedings will be used instead of a Foley Catheter in order to make sure the feedings are properly administered in the feeding port instead of the balloon port. After the six (6) week post-insertion by a gastroenterologist/surgeon has passed and the criteria in paragraph 4b(2) above are met, follow these guidelines:

(a) Nasogastric Feeding Tube--The registered nurse will insert a new nasogastric tube in a timely manner so that the feeding schedule will not be interrupted.

(b) Gastrostomy Feeding Tube--The registered nurse will insert a new gastrostomy tube immediately since delay may result in inability to reinsert. An exception to this would be in the event a licensed practical nurse is skilled in the reinsertion of a gastrostomy tube, he/she may reinsert the tube immediately.

(c) Jejunostomy Feeding Tube--The resident will be sent to the emergency room promptly for reinsertion by the emergency room physician since delay may result in inability to reinsert. An exception to this would be in the event a registered nurse is skilled in the reinsertion of a jejunostomy tube, he/she may reinsert the tube immediately rather than send the resident to Unit 31 for reinsertion. The average length of the submucosal tunnel for the jejunostomy tube is about 10 cm (4 inches) long.

(6) If the enteral feeding tube becomes clogged, follow the procedure in item #7 "Unclogging Enteral Tubes" on page 18 of Attachment 3. If the feeding tube remains clogged after attempting to unclog, follow the guidelines for reinsertion of the tube listed above in paragraph 4b(2).

(7) Disconnecting (purposely or accidentally) and reconnecting the feeding tubes in order to provide care will be performed only by a licensed nurse. Each time the tube is disconnected, it should be flushed with water/saline. If the tube is found accidentally disconnected, it should be flushed with water/saline prior to reconnection.

(8) A registered nurse will periodically change the nasogastric feeding tubes. The frequency with which nasogastric tubes will be routinely changed requires a physician's order. It is recommended that the physician's order for routine change include type and size of tube.

(9) Enteral feeding will be ordered by the attending physician who will consult with the unit dietitian for appropriate formula needs.
(10) The attending physician is responsible for ordering the amount of water/saline to be used for flushing a feeding tube. In the event a feeding tube is in place but is not being used for feeding purposes (for example, a resident on intravenous fluids or trial oral feedings) the physician will order the frequency for flushing the tube with water/saline and the amount.

(11) The amount of acceptable gastric residual will be determined by physician's order which should also indicate whether to return gastric contents to the stomach or discard.

(12) The cleansing solution to be used for stoma site care will be ordered by the physician.

(13) Trial oral feedings will be attempted upon a physician's order. The physician may discontinue attempts to restore the resident to oral intake at any point that the resident's inability to receive sufficient oral intake is determined to be due to a permanent condition. (See Guidelines for Trial Oral Feeding, Attachment 4.)

(14) The following will be routinely monitored by the nursing staff:

(a) intake and output every shift;

(b) vital signs as ordered and prn, but at least once every shift;

(c) signs and symptoms of dehydration or over-hydration, electrolyte imbalances, nausea, vomiting, excessive perspiration and amount of liquid stool every shift;

(d) bowel sounds prior to each bolus feeding or when continuous feeding every four (4) hours, during waking hours;

(e) breath sounds at least once per shift and after each bolus feeding;

(f) frequency and description of stools every shift;

(g) weigh at least weekly unless ordered more frequently by the physician. (The appropriate registered nurse will notify the physician and appropriate clinical dietitian at least monthly of weight status or more frequently with significant weight loss.)

(Signed original on file in Central Health Information Services)

DIANE R. JAMES
Hospital Administrator

5 Attachments:
1. Form 581, Approval for Enteral Feeding
2. Interaction of Oral Phenytoin with Enteral Tube Feeding
3. Maintenance and Monitoring of Enteral Feeding Systems
4. Guidelines for Trial Oral Feeding
5. Form 579, Tube Feeding Record

SUMMARY OF REVISED, ADDED, OR DELETED MATERIAL
This procedure was reviewed and there were no changes in the content.
SECTION I (Completed by Unit M.D.): Brief summary of illness relating to need for tube feeding.

_________________________________________________________  __________________________
SIGNATURE                                                                                          DATE & TIME

SECTION II (Completed by Recovery Team Leader): Brief summary of recommendations of Speech/OT and/or ENT Specialist.

_________________________________________________________  __________________________
SIGNATURE                                                                                          DATE & TIME

SECTION III (Completed by Board Certified Physician Consultant): Recommendations.

_________________________________________________________  __________________________  ______________________
SIGNATURE                                                            SPECIALTY                                DATE & TIME

SECTION IV (Completed by Head of Clinical Dietary Department): Recommendations.

_________________________________________________________  __________________________  ______________________
SIGNATURE                                                            SPECIALTY                                DATE & TIME

SECTION V (Completed by Health Care Services Medical Service Director): Recommendations/Statement.

_________________________________________________________  __________________________  ______________________
SIGNATURE                                                            SPECIALTY                                DATE & TIME

INSTRUCTIONS: SEE REVERSE SIDE FOR SPECIFIC INSTRUCTIONS.

It must go with resident upon any transfers to and from all units and community hospitals or physicians’ offices.

This form is to be filed in the Legal section of the ward chart. Do not thin from chart.

ADDRESSOGRAPH:

** CONFIDENTIAL & PRIVILEGED INFORMATION *** FOR PROFESSIONAL USE ONLY **

FLORIDA STATE HOSPITAL, CHATTAAHOOCHEE, FL 32324

Form 581, (Revised) Sep 07

FLORIDA STATE HOSPITAL

Attachment 1   APPROVAL FORM FOR

Operating Procedure 150-15

Page 1 of 2
RESIDENT’S NAME AND NUMBER: _____________________________________________

SECTION VI (Completed by Social Worker):

Resident’s Statement:

Family’s Statement:

SIGNATURE                                                                                                  DATE & TIME

SECTION VII (Completed by Team Leader): Recovery Team’s Recommendations:

SIGNATURE                                                                                                  DATE & TIME

SECTION VIII (Completed by Clinical Director):

Approved __________________ Disapproved __________________

SIGNATURE                                                                                                  DATE & TIME

INSTRUCTIONS:

Section I: Unit MD completes and forwards with Consultation Referral/Report form to one consulting physician for assessment of enteral feeding and resident care management recommendations.

Sections II & III: The consultant briefly summarizes the diagnosis and states recommendations for treatment and management of the resident’s care.

Section IV: Head of Clinical Dietary Department states nutritional recommendations.

Section V: The Health Care Services Medical Service Director will evaluate and sign.

Section VI: After receipt of the consultant’s recommendations, the social worker advises the team that he/she will explore the resident’s and family’s desires regarding the recommendations. After interviewing everyone, the social worker will convene a team meeting for final recommendations.

Section VII: The recovery team leader briefly states recommendations for treatment and care.

Section VIII: Final approval/disapproval is given by the Clinical Director.

** CONFIDENTIAL & PRIVILEGED INFORMATION *** FOR PROFESSIONAL USE ONLY **

FLORIDA STATE HOSPITAL, CHATTahoochee, FL 32324

Form 581, (Revised) Sep 07
Office of Primary Responsibility: Health Care Medical Service Director
Attachment 1  APPROVAL FORM FOR ENTERAL FEEDINGS
Page 2 of 2  Operating Procedure 150-15  Page 2 of 2
1. **Purpose:** To maintain therapeutic phenytoin levels in residents receiving oral phenytoin and enteral tube feedings.

2. **Scope:** This operating procedure applies to those residents who receive enteral feedings co-administered with oral phenytoin.

3. **References:**

4. **General Information:** Phenytoin is well known to be an effective anticonvulsive medication when therapeutic serum levels (10 to 20 mcg/ml) are obtained. In residents receiving enteral tube feedings, absorption of phenytoin from suspension or capsules may be decreased by as much as 70%. This can produce subtherapeutic levels in the residents previously stabilized on phenytoin who are begun on enteral tube feeding.

5. **Procedure:**
   a. Prior to starting enteral feedings, a baseline phenytoin level will be obtained.
   b. Phenytoin levels will be obtained every three days after starting tube feedings for ten days (days 3, 6, and 9). If phenytoin levels are not within therapeutic range, adjust dosage of phenytoin as indicted and continue obtaining phenytoin levels every three days until stabilized.
   c. Once the phenytoin level is stabilized, obtain phenytoin levels according to Operating Procedure 150-34, Psychotropic Medication Prescription Standards.
   d. At the time of discontinuing enteral feedings, decrease phenytoin to dosage prescribed prior to enteral feedings.

   (1) Phenytoin levels will be obtained every three days after stopping enteral feedings (days 3, 6, and 9). If phenytoin levels are not within therapeutic range, continue every three days until stabilized.

   (2) Adjust dosage of phenytoin as indicted until level stabilizes.
1. **Nasogastric Tube Insertion and Removal**

**Purposes:** Safely achieve gastric intubation for purposes of gastric decompression, gavage, administration of medications, or laboratory testing of gastrointestinal contents and function.

**Staff Responsible:** Registered Nurse only.

**Assessment for Insertion:**

- Physician's order for gastric intubation
- Agency policy (Procedure 150-15 Tube Feeding)
- History of nasal trauma or deformity and alternate oral route if indicated
- Need for suction, specimens, or clamp

**Equipment for Insertion:**

- Nasogastric tube of appropriate size
- Water-soluble lubricant
- 50 ml irrigating syringe
- Emesis basin and tissues
- Adhesive tape in strips
- Suction device if needed, clamp if needed
- Specimen containers if needed
- Stethoscope
- Cup of water with straw or ice chips
- Non-sterile gloves
- Towel

**Preparation for Insertion:**

- Wash hands
- Identify resident
- Assemble equipment
- Explain procedure
- Provide privacy
- Put on gloves (Use other protective equipment as conditions warrant)

**Procedure: Nasogastric Tube Insertion**

<table>
<thead>
<tr>
<th>STEPS</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assist to high Fowler's position unless contraindicated.</td>
<td>Facilitates passing of naso-gastric tube, decreases gag reflex</td>
</tr>
<tr>
<td>Left lateral position may be assumed if high Fowler's position is contraindicated.</td>
<td>Facilitates passage of tube into stomach.</td>
</tr>
<tr>
<td>Put towel on chest.</td>
<td></td>
</tr>
<tr>
<td>STEPS</td>
<td>ADDITIONAL INFORMATION</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Measure length of tube required for intubation by placing tube end at tip of nose going to earlobe and then xyphoid process. Mark this point with adhesive tape.</td>
<td>Determines approximate length needed to reach stomach.</td>
</tr>
<tr>
<td>Instruct to hyperextend neck in order to visualize nostril.</td>
<td>Depresses floor of nasal passage and facilitates insertion of tube into nasopharynx.</td>
</tr>
<tr>
<td>Lubricate tube. Steadily and gently insert tube into nasopharynx along floor of nostril.</td>
<td>Do not force tube against obstruction.</td>
</tr>
<tr>
<td>If tube meets resistance, rotate it slightly aiming downward. If resistance continues, withdraw, re-lubricate, and insert in other nares.</td>
<td></td>
</tr>
<tr>
<td>Offer ice chips or cup with straw.</td>
<td></td>
</tr>
<tr>
<td>Instruct to swallow small sips of water through straw or to swallow ice chips when tube reaches oropharynx with head in flexed position.</td>
<td>Minimizes gagging and facilitates passage of tube into esophagus. Can also stimulate swallowing by stroking at cricoid cartilage.</td>
</tr>
<tr>
<td>Withdraw tube immediately if change occurs in respiratory status.</td>
<td>May indicate placement of tube in bronchus.</td>
</tr>
<tr>
<td>Continue to insert tube until tape marker is reached.</td>
<td>Gagging is not uncommon. If coughing or choking occurs or if voice changes or is lost, STOP and assess placement. Remove if cough continues. Check mouth for coiled or kinked tubing, and remove tube if present.</td>
</tr>
<tr>
<td>Visualize inside of mouth to pharynx.</td>
<td>Indicates tube should be in stomach.</td>
</tr>
<tr>
<td></td>
<td>Recheck to determine whether tubing is coiled or kinked.</td>
</tr>
</tbody>
</table>

**Assess Placement:**

<table>
<thead>
<tr>
<th>STEPS</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auscultate lungs for equal and full breath sounds.</td>
<td>This confirms placement of tube. Small-bore tubes must still be radiographed. Injected air may be audible on auscultation in the epigastric area even with bronchial placement.</td>
</tr>
<tr>
<td>Gently aspirate for gastric contents. If none, insert tube a little farther and wait, or change position. Auscultation of 10-20cc of injected air is an adjunct assessment only. Anchor tube securely according to procedure (#3 in this attachment). Begin feeding only after placement is confirmed.</td>
<td></td>
</tr>
</tbody>
</table>
Discard equipment.

Wash hands. Prevents spread of microorganisms.

Report unusual events or difficulties to the physician and discuss modifications.

**Document:**

Date and time
Procedure performed
Type and size of nasogastric tube inserted
Amount and color of gastric contents aspirated
Response of resident Legal signature

**Procedure: Nasogastric Tube Removal**

<table>
<thead>
<tr>
<th>STEPS</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash hands and put on gloves</td>
<td></td>
</tr>
<tr>
<td>Schedule removal well after feeding. Explain procedure to resident, and position him or her upright.</td>
<td>This prevents nausea, emesis, and aspiration.</td>
</tr>
<tr>
<td>Clamp or stopper tube firmly.</td>
<td>This prevents release of tube contents above gastric sphincters.</td>
</tr>
<tr>
<td>Loosen tape anchoring tube.</td>
<td></td>
</tr>
<tr>
<td>Remove tube gently but swiftly.</td>
<td>This minimizes gag as tube passes through pharynx.</td>
</tr>
<tr>
<td>Dispose of mercury weighted tip of tube in designated container.</td>
<td>Mercury cannot be incinerated because of release of toxic fumes. Follow infection control procedures for disposal of other soiled materials.</td>
</tr>
<tr>
<td>Document tube removal and observations in the appropriate record.</td>
<td>Report unusual events or difficulties to the physician.</td>
</tr>
</tbody>
</table>

2. **Gastrostomy Tube Reinsertion**

**Purposes:** To reinsert a gastrostomy tube into the stomach; to prevent trauma or discomfort to the resident.

**Staff Responsible:** Registered Nurse only. (Exception if Licensed Practical Nurse skilled in procedure.)
Equipment:

Non-sterile gloves (sterile gloves if indicated)
Gastrostomy tube
Water-soluble lubricant
Pre-filled syringe of water if balloon is to be inflated
Empty syringe to deflate balloon
Soap and water
Other cleansing or antiseptic solution as ordered
Plastic bag for disposal
Tube clamp, stopper or stopcock
Dressings and tape for anchoring
Irrigation syringe compatible with distal tube end

Precautions:

The healing time required from original insertion is usually about six weeks. During this time, extra precaution should be taken to prevent trauma or accidental displacement. Proper stabilization of the tube should be continued. It may be necessary to use a soft binder to protect the site from the resident or accidental traction.

An appropriate replacement tube should be readily available for emergency replacement. Prompt replacement is necessary to prevent the tract from rapid closing or shrinking and to prevent leakage into the abdominal cavity.

Procedure: Gastrostomy Tube Reinsertion

<table>
<thead>
<tr>
<th>STEPS</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain procedure to resident.</td>
<td></td>
</tr>
<tr>
<td>Position resident supine, provide privacy and drape area.</td>
<td>Choose a quiet time before a feeding to prevent discomfort and spillage.</td>
</tr>
<tr>
<td>Wash hands.</td>
<td>This is usually a clean procedure unless a fresh or open wound is present.</td>
</tr>
<tr>
<td>Set up equipment next to resident.</td>
<td></td>
</tr>
<tr>
<td>♦ Lubricate new tube.</td>
<td></td>
</tr>
<tr>
<td>♦ Open dressings and tear tape.</td>
<td></td>
</tr>
<tr>
<td>♦ Apply gloves.</td>
<td></td>
</tr>
<tr>
<td>Remove old dressings and tape, and cleanse debris from stoma site and skin.</td>
<td>Prevent introduction of debris into stoma. Use plastic bag for disposal.</td>
</tr>
<tr>
<td>Remove gastrostomy tube:</td>
<td></td>
</tr>
<tr>
<td>♦ Gently pull tape to test balloon placement against stomach wall.</td>
<td></td>
</tr>
<tr>
<td>STEPS</td>
<td>ADDITIONAL INFORMATION</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
</tr>
<tr>
<td>♦ Mark tube with tape at its exit point from stoma.</td>
<td>This is to mark the length of tube inserted once it is removed.</td>
</tr>
<tr>
<td>♦ Deflate old balloon by aspirating.</td>
<td>If resistance is met, seek physician's assistance. Adhesions or sutures may be unseen.</td>
</tr>
</tbody>
</table>

Pull old tube straight out of stoma.

♦ Examine tube and stoma

Note marked length of tube and character of drainage and stoma site.

Quickly cleanse site according to procedure #3 in this attachment, and change gloves if contaminated by debris or discharge.

Insert new tube.

♦ Estimate length to be inserted from marked length on old tube. | Excessive length may pass tube into gastric outlet or duodenum. |

♦ Insert lubricated tube at right angle to stoma. | This prevents undermining or fistula formation at stoma site. |

♦ Pass tube 1 inch or more past referenced length. | This allows room for balloon inflation. If resistance is met, leave tube in place and seek physician's assistance. |

♦ Aspirate stomach contents to verify placement. | Tap water is suitable for a clean procedure. Over-inflation may provide gastric motility or production of secretions gastric content. |

♦ Inflate balloon with prescribed amount of water. This is a minimum amount to keep tube in place

Gently pull back on tube until balloon rests against stomach wall.

Clamp, plug, or stopper tube.

Cleanse site as indicated, and dress and anchor.

Dress and reposition resident for comfort.

Remove plastic bag for disposal.

Use minimum amount of dressing or tape to prevent irritation to skin but adequate to prevent tube migration or traction.

Follow infection control procedures to prevent cross-contamination.
### STEPS

| Document the gastrostomy tube change. Include the reason for change, type and size of tube and balloon removed and reinserted, condition of stoma, observed condition of tube, drainage characteristics, observed tolerance of resident, and instructions to resident. Report to the physician any unusual observations. |

### ADDITIONAL INFORMATION

#### 3. Enteric Tube Stabilization and Dressings

**Purposes:** To provide stabilization of the tube; to prevent erosion of the skin around the tube; to prevent tube migration or removal.

**Staff Responsible:** Registered Nurse/Licensed Practical Nurse

**Equipment:** Equipment options include those appropriate to naso-gastric, gastrostomy, and jejunostomy tubes.

1-inch hypoallergenic tape (cloth or paper)

4 X 4 gauze with 2-inch slit

Prescribed cleansing agents

Normal saline

Plastic bag for disposal

Optional equipment:
- Adhesive remover
- Non-sterile gloves

#### A. Nasogastric Tube Stabilization (Applicable to Nasoenteric Tubes)

**General Considerations:**

In the rehabilitation setting, nasogastric feedings are utilized for short-term management of nutritional needs or for Long-Term management of residents in whom gastric or jejunostomy tubes are contraindicated.

Displacement or removal can occur with traction or on loosening of the tape. Migration or kinking can occur during re-anchoring or with vigorous coughing, gagging, or emesis.

Considerations for choice of method 1 or 2 include resident skin tolerance, need for rotation of tape site, resident preference or behavior, and presence of other equipment (e.g. oxygen nasal cannula).

Alternate the sites of taping, evaluate skin tolerance to techniques and avoid direct pressure of tubing against skin or mucous membranes.

When anchoring over hair-covered skin other than the face, avoid shaving. Rather, clip the hair short.

Remove tape in the direction of hair growth.

Adhesive removers must be thoroughly washed off with soap and water to avoid chemical burns.

Replace tape daily and prn.
Resident Education: Educate the resident of the purpose, the method used to anchor tube, and the need to keep the nursing staff informed of problems with the tube or anchoring.

**Procedure: Nasogastric Tube Stabilization**

<table>
<thead>
<tr>
<th>STEPS</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash hands.</td>
<td></td>
</tr>
<tr>
<td>Cut a 1½-inch piece of 1-inch wide hypoallergenic tape.</td>
<td></td>
</tr>
<tr>
<td>Split tape about 1 inch length-wise from one end.</td>
<td></td>
</tr>
<tr>
<td>Attach un-split end to resident's nose, then wrap split ends in opposite direction around tube.</td>
<td></td>
</tr>
<tr>
<td>If necessary, secure tube to resident's cheek or forehead.</td>
<td>Do not obstruct vision. Keep tube out of reach of resident who may pull it out.</td>
</tr>
</tbody>
</table>

B. Gastric Tube Stabilization and Dressings

General Considerations:

Gastrostomy stoma site care for new, infected, or draining wounds requires aseptic cleansing with prescribed agents and rinsing with normal saline. Healed stomas can be cleansed with soap and water and may not need a dressing.

One of the problems noted with gastric tube feedings is tube migration. This may cause pyloric or intestinal obstruction, which is prevented by proper anchoring.

Excoriation of the stoma edges may occur when lateral traction or taping of the gastric tube is done. Alternate the direction of traction or ease the tension of the traction if this occurs.

If gastric tube irrigation or excoriation of stoma edges is a problem, use method 2 for tube stabilization or a similar method that provides vertical traction. If neither of these problems exists, use method 1.

Replace tape daily and prn.

Resident Education: Educate the resident of the purpose of the stabilization technique and the care of the stoma site, if appropriate.

Inform the resident of complications and the need to keep nursing staff informed of problems or anchoring considerations with either method.
### Procedure, Method 1: Gastric Tube Stabilization/Dressings

<table>
<thead>
<tr>
<th>STEPS</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Wash hands and put on gloves.</td>
<td></td>
</tr>
<tr>
<td>Remove old dressing.</td>
<td>Dispose of according to infection control procedures.</td>
</tr>
<tr>
<td>Cleanse around tube.</td>
<td></td>
</tr>
<tr>
<td>Place a 4 x 4 dressing with a slit around gastric tube. Tab the tape ends. Tape down edges window-frame fashion.</td>
<td></td>
</tr>
<tr>
<td>If necessary, tape tube down approximately 4 inches from stoma site. Tape straight across or in a V shape, with the base of the V pointing toward the stoma.</td>
<td>This may not be needed if the stoma site is healed.</td>
</tr>
</tbody>
</table>

### Procedure, Method 2: Gastric Tube Stabilization/Dressings

<table>
<thead>
<tr>
<th>STEPS</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Wash hands and put on gloves.</td>
<td></td>
</tr>
<tr>
<td>Remove old dressing. Check pressure points where tube is taped.</td>
<td>Dispose of according to infection control procedures.</td>
</tr>
<tr>
<td>Cleanse around tube.</td>
<td></td>
</tr>
<tr>
<td>Roll two 4 x 4 dressings together to form a cylinder about 4 inches long by 1 inch by diameter.</td>
<td>This will provide vertical traction.</td>
</tr>
<tr>
<td>Place this roll on one side of tube and stoma, and wrap tube completely around roll, going over the cylinder first, then under and back over.</td>
<td></td>
</tr>
<tr>
<td>Place a 4 x 4 dressing over tube and gauze cylinder. Place a piece of tape perpendicular to tube but parallel to gauze roll on opposite side of gauze roll. Then place a piece of tape parallel to and on each side of the tube.</td>
<td></td>
</tr>
<tr>
<td>Place a piece of tape in a V shape, with the base of the V pointing toward the stoma. Affix this approximately 4 inches from stoma.</td>
<td>This will prevent retraction of the tube into the stoma.</td>
</tr>
</tbody>
</table>
C. Jejunostomy Tube Stabilization

General Considerations:

There are various jejunostomy tubes. Some are anchored internally. The ones that are not have the greatest potential to migrate in or to fall out. Physicians may choose to anchor these tubes by suturing them to the resident's abdomen. Sutures may loosen easily, however, which causes an alteration in skin integrity and comfort for the resident. Therefore, appropriate nursing interventions that include jejunostomy tube stabilization are needed.

Jejunostomy stoma site care for new, infected, or draining wounds or suture sites may require cleansing with prescribed agents and rinsing with normal saline. Healed stomas can be cleansed with soap and water.

Replace tape daily and prn.

Resident Education: Educate the resident of tube stabilization procedures, purpose, and potential problems or anchoring issues.

Procedure: Jejunostomy Tube Stabilization

<table>
<thead>
<tr>
<th>STEPS</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash hands and put on gloves.</td>
<td></td>
</tr>
<tr>
<td>Remove old dressing. Check pressure points where tube is taped.</td>
<td></td>
</tr>
<tr>
<td>Cleanse around tube.</td>
<td>Discard waste according to infection control procedures.</td>
</tr>
<tr>
<td>Place 4 x 4 dressing with 2-inch slit around tube. Tape down in window-frame fashion.</td>
<td>This may not be needed if the stoma site is healed.</td>
</tr>
<tr>
<td>Take a 4- to 6-inch piece of hypoallergenic tape and make small tabs on each end.</td>
<td>Tabs make it easier to remove tape when it needs to be changed.</td>
</tr>
<tr>
<td>Secure the tube.</td>
<td>This provides stabilization to prevent tube from being pulled out.</td>
</tr>
<tr>
<td>Place the piece of tape approximately 4 inches from stoma, perpendicular to tube or place the piece of tape underneath tube, adhesive side up, approximately 4 inches from stoma. Then cross each end of tape over top of tube and adhere it to resident's abdomen, forming V shape with base of V pointing away from stoma.</td>
<td></td>
</tr>
<tr>
<td>Record any difficulties with stabilization procedures. Document skin or other complications.</td>
<td></td>
</tr>
</tbody>
</table>
4. Gastric Residual

**Purposes:** To measure gastric contents and, indirectly, gastric motility before, during, or after enteric feeding; to prevent Gastroesophageal Reflux and potential aspiration.

**Staff Responsible:** Registered Nurse/Licensed Practical Nurse

**Equipment:**

- Syringe (60-mL catheter or Luer-lok tip compatible with distal tube connection)
- Clamp, plug, or stopcock
- Graduated emesis basin or container
- Non-sterile gloves

**General Considerations:**

Gastric residual volume are indicated when:

- Before each feeding or every four hours for continuous feeding.
- Initiating or upgrading volume, rate or concentration of enteric feeding solution.
- The resident is identified as high-risk for aspiration.
- Emesis has occurred or is a frequent event.
- Monitoring postoperative recovery from gastrostomy tube insertion.
- The resident is febrile or is under other stress that alters metabolic function or state of responsiveness.
- The resident exhibits sudden restlessness, discomfort, or respiratory distress during or after a feeding.

Measurement of gastric residual is not always an absolute equivalent of gastric content. The proximal end of the gastric tube may access only the upper portion of the gastric volume. Repositioning the resident may be necessary to aspirate contents fully. Astute clinical judgment must guide the nurse's visualization of this procedure and assessment of the resident.

In the event of a medical emergency (e.g., seizure, hypotension, or cardiopulmonary arrest) during feeding or soon after feeding, prompt gastric aspiration may prevent reflux and aspiration. For residents at high risk for crisis or whose feeding tolerance is unknown, suction and airway equipment are kept nearby.

Gastric contents are usually returned to the stomach because they contain nutrients, digestive enzymes, and perhaps medications. If the contents exceed the ordered amount or if reflux is imminent, however, the contents may be discarded without serious threat of depletion of enzymes or electrolytes. This should be clarified with a physician's order. Obvious loss of medication and discarded volume are reported to the physician.

Acceptable residual amounts may vary in physician orders. These are determined by consideration of the individual resident, recovery history, risks, or tube placement protocols. As tolerance is demonstrated, residual amounts are based on hourly rate if feeding is continuous or on percentage of feeding volume if feeding is bolused.
In the absence of a physician's order, if the residual is greater than the amount infused in two (2) hours, turn pump off for one hour, then recheck. If residual is greater than 150 ml., notify the physician.

The sudden onset of slowed gastric emptying or reflux requires investigation to rule out:

♦ Displacement or migration of the gastric tube into the esophageal or pyloric sphincter.
♦ Severe constipation or other form of intestinal obstruction.
♦ A resident position (e.g., flexed or left-sided) that delays emptying.
♦ Febrile or less conscious state.

Slowed gastric motility may be an anticipated side effect of medications, especially anticholinergics, some antibiotics, preparations in acidic or oil-based solutes, and narcotics. The action of metoclopramide is antagonized by narcotics and anti-cholingergics. Hypertonic or hypotonic feedings may also slow motility.

Jejunostomy tubes and small-diameter polyurethane tubes are not aspirated routinely because the proximal end is located within the intestine, which is emptied by gravity and peristalsis rather than by the sphincters. Aspiration is also likely to clog or kink a small tube. Gastric reflux can still occur but cannot be measured without placement of a gastric tube. On occasion, a gastric tube may be placed for decompression.

Resident Education:

Educate the resident of the complications and risks that may indicate signs of gastric residual problems.

Advise that they report these to the appropriate medical or nursing staff (inpatient or outpatient).

**Procedure: Gastric Residual**

<table>
<thead>
<tr>
<th>STEPS</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash hands and put on gloves. Prepare resident with explanation.</td>
<td></td>
</tr>
<tr>
<td>Stop feeding at prescribed time. Pinch tube while disconnecting or unclamping.</td>
<td>Introduction of air can increase distention.</td>
</tr>
<tr>
<td>Insert syringe snugly into tube, and aspirate stomach contents gently.</td>
<td>Vigorous aspiration may traumatize mucosa.</td>
</tr>
<tr>
<td>If less than acceptable residual amount is aspirated, return it to stomach. The physician will order the acceptable residual amount.</td>
<td>Check resident position and comfort to verify reliability of gastric residual.</td>
</tr>
<tr>
<td>If residual is more than acceptable amount, return only the limit, according to physician's order.</td>
<td>Observe resident closely for increased distress. Report to physician.</td>
</tr>
<tr>
<td>STEPS</td>
<td>ADDITIONAL INFORMATION</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Pinch tube, withdraw syringe, and clamp or reconnect tubing. Resume feeding only when residual amount is acceptable or when modifications are made in feeding program as ordered. Document the amount of residual, any unusual appearance, and subsequent actions or interventions. Note whether the physician was notified and the reasons for notification.</td>
<td></td>
</tr>
</tbody>
</table>

5. **Enteric Feeding Administration**

**Purposes:** To meet nutritional and hydration requirements by delivery through nasogastric, gastric, or intestinal routes; to prevent enteral or respiratory complications.

**Staff Responsible:** Registered Nurse/Licensed Practical Nurse

**Equipment:**
- Gastric feeding unit
- Bottle, bag, or syringe compatible with tubing and pump
- Volumetric pump as indicated
- Prescribed feeding
- Flush solution (usually water or saline)
- IV pole
- Clamp or stopper
- Blue food coloring (supplied by Food Service Department)
- Non-sterile gloves

**Resident Education:** Educate the resident of the proper procedure.

<table>
<thead>
<tr>
<th>STEPS</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position resident sitting or as ordered by physician. The supine position is to be avoided for residents at high risk for emesis and aspiration. Gastric emptying is facilitated by upright or right-side lying.</td>
<td></td>
</tr>
</tbody>
</table>

Place resident in environment that promotes optimal relaxation and contains tolerable stimulation. Feeding is normally a social activity. Olfactory, visual, and auditory stimulation are regular components of feeding and may aid gastric motility.

Complete oral hygiene, toileting, and suctioning before feeding. Relaxation of the stomach antrum is necessary for gastric filling. Residents distressed by non-oral intake may need privacy and decreased distraction during normal mealtimes.

Wash hands and put on gloves.
<table>
<thead>
<tr>
<th>STEPS</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check for feeding tube placement:</td>
<td>Aspirated gastric contents or radiographs are the only certain methods of verifying placement.</td>
</tr>
<tr>
<td>♦ Auscultate lungs for equal and full breath sounds.</td>
<td>Aspiration is not recommended with small-diameter or jejunal tubes.</td>
</tr>
<tr>
<td>♦ By aspirating gastric contents with a syringe.</td>
<td>Abnormally short or long exposed tubing indicates need for further placement.</td>
</tr>
<tr>
<td>♦ By observing length of exposed tubing and security of anchoring.</td>
<td></td>
</tr>
<tr>
<td>♦ By gently pulling gastrostomy tube to insure balloon or mushroom placement at stomach wall.</td>
<td></td>
</tr>
<tr>
<td>Check for feeding tube patency with water, especially with small-diameter tubes.</td>
<td></td>
</tr>
<tr>
<td>Set up enteral feeding pump according to procedure #15 in this attachment if continuous feedings ordered by physician.</td>
<td>Blue food coloring will help identify formula in the event of aspiration (yellow, green, or red colors may be mistaken for or mask secretions). Gastric motility is not affected by fluids at cool temperatures, but subjective discomfort may be reported by resident. Some residents may experience cramping with cold fluids.</td>
</tr>
<tr>
<td>Pour and measure feeding at resident location. Add drops of blue food coloring per feeding only if ordered by physician. Deliver at room temperature.</td>
<td>Residents with poor arousal or hyperarousal are at high risk for aspiration. Alternatives are slower rates, small amounts or frequent small feedings by syringe.</td>
</tr>
<tr>
<td>Deliver feeding at prescribed rate with periodic supervision for possible signs of aspiration which include: sudden intense cough, increase in amount of secretion produced, blue secretions (if blue food coloring used), cyanosis, wheezing, gurgling, inability to expectorate, difficulty breathing, crackles, wheezes, decreased breath sounds, increased restlessness and fever.</td>
<td></td>
</tr>
<tr>
<td>If aspiration is suspected, the tube feeding is to be stopped immediately and the physician notified of the resident's condition.</td>
<td>Residents who slide down in bed or assume a flexed position lose elevation and compress abdominal contents, which may encourage regurgitation.</td>
</tr>
<tr>
<td>Check resident positioning for trunk alignment and extension, especially for those in bed.</td>
<td></td>
</tr>
<tr>
<td>STEPS</td>
<td>ADDITIONAL INFORMATION</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------</td>
</tr>
<tr>
<td><strong>IF MOVEMENT OR TURNING IS NECESSARY, DO SO SLOWLY WITH FEEDING TURNED OFF.</strong></td>
<td>Vestibular stimulation may trigger emesis.</td>
</tr>
<tr>
<td>Maintain resident elevation as ordered per physician.</td>
<td>Verify emptying with gastric residuals.</td>
</tr>
<tr>
<td>Flush feeding tube with water or saline using a syringe. The amount of water or saline will be determined by the physician’s order:</td>
<td>Tube patency is assured.</td>
</tr>
<tr>
<td>♦ After each feeding.</td>
<td></td>
</tr>
<tr>
<td>♦ Every four hours during continuous feeding.</td>
<td></td>
</tr>
<tr>
<td>♦ Before and after medications.</td>
<td></td>
</tr>
<tr>
<td>♦ After checking residual.</td>
<td></td>
</tr>
<tr>
<td>Clamp or plug feeding tube or reconnect to pump if on continuous feedings.</td>
<td></td>
</tr>
<tr>
<td>Document the delivery of feeding, including endurance of the resident and difficulties in administration.</td>
<td>Record intake as indicated on Form 579, Tube Feeding Record (see Attachment 5).</td>
</tr>
</tbody>
</table>

6. **Intolerance of Feeding When Feeding Tube in Place**

If the resident displays signs of intolerance, notify the physician and document symptoms in the progress notes. Signs of intolerance: high gastric residuals, nausea, and vomiting, diarrhea, abdominal pain or cramps, abdominal distention.

7. **Unclogging Enteral Tubes**

**Purposes:** To reestablish patency of an enteral feeding tube; to prevent the necessity of tube reinsertion.

**Staff Responsible:** Registered Nurse/Licensed Practical Nurse

**Equipment:**

- Syringes with compatible Luer-lok or catheter tip
  - 5 to 20 mL for small-diameter tube
  - 20 to 60 mL for tubes larger than #10 French

- Tepid water
General Considerations:

The optimal approach to maintain patency of enteral feeding tubes is to follow procedures for administration of feeding and medications. Nevertheless, obstruction may be anticipated as a common problem when:

- Small-diameter feeding tubes are used (#10 French or smaller).
- Viscous formulas are delivered at a slow rate.
- Gastric retention causes stasis of gastric contents.
- Non-liquid medication or supplements are administered.
- Fluid administration is restricted.
- Gastric content includes the residue of oral feeding.

Attempts to unclog enteral tubes carry risks of tube displacement, tube rupture, and therefore, resident injury. To minimize the risks:

- Assess the resident's recent history of tube-related complications and their resolutions.
- Use the most conservative, simple approaches first.
- Consult the physician for discussion of options available in unclogging the tube and for eliminating options that are contraindicated.
- Assess the relative risks of unclogging the tube compared to the disadvantages of removing and reinserting the tube.

Discuss with the physician modifications in care that minimize the recurrence of clogging:

- Choice of feeding formula or delivery method.
- Alternate choice of tube.
- Form of, or substitute for, medication.
- Frequency, amount, and type of tube flush.

**Procedure: Unclogging Enteral Tubes**

<table>
<thead>
<tr>
<th>STEPS</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash hands and put on gloves.</td>
<td></td>
</tr>
<tr>
<td>Explain procedure to resident, and position him or her as if for feeding.</td>
<td></td>
</tr>
<tr>
<td>Examine tube for external signs of displacement:</td>
<td>Attempts to unclog a displaced tube could result in aspiration or tissue trauma. Proximal end of tube may also be located against mucosa or kinked or coiled.</td>
</tr>
<tr>
<td>STEPS</td>
<td>ADDITIONAL INFORMATION</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
</tr>
<tr>
<td>♦ Disturbed stabilization.</td>
<td></td>
</tr>
<tr>
<td>♦ Abnormal length of tube (shorter or longer than previously observed).</td>
<td></td>
</tr>
</tbody>
</table>

Disconnect and unclamp tube.

Gently milk tube by holding stable with one hand and compressing the tubing between the fingers of the other hand while slowly sliding fingers down the tubing from point of insertion to distal end, and allow passive gravity drainage. Repeat three times.

Milking may move a small plug and create mild negative pressure.

Fill a small syringe with tepid water unless physician has ordered another solution. Inject and withdraw water with gently plunging action.

Water may dissolve a thin plug of particles. Vigorous plunging may further solidify plug or rupture tube.

After a few minutes, wait for water to dissolve plug, then withdraw water from tube.

Milk from proximal to distal end of tube.

Gently milk tube again.

Tube rupture may or may not be perceived by resident. Fluid in tube will be released at site of rupture and may leak at insertion site.

Monitor resident for signs of discomfort or distress. Observe abdominal insertion site.

If tube remains clogged, call physician for further orders.

---

8. **Storage of Enteral Feeding and Related Supplies**

When an enteral feeding order is written or current order changed by the physician, the nurse makes the necessary changes on the nourishment order form. Each unit will develop an operating procedure for the ordering and storage of enteral feeding.

If a resident is determined to be eligible for American Home Services (qualifies for Medicare A & B), the ward day shift charge nurse will notify the unit American Home contact designee of the resident's initial enteral feeding order or changes in the order. The designee will then contact the American Home representative. The American Home representative will bring any needed supply item within 24 hours of notification and routinely on the fifth of each month.

9. **Jejunostomy and Gastrostomy Site Care**

**Staff Responsible:** Registered Nurse/Licensed Practical Nurse

Each shift will inspect the skin for redness, tenderness, increased warmth, swelling, irritation or presence of purulent drainage or gastric leakage.
Each shift will cleanse skin with soap and water first, and then cleanse with cleaning agent ordered by the physician, using spiral pattern, beginning next to the site and moving outward. If tube has disk on skin, clean under disk with cotton swab.

After skin is cleaned, dry area thoroughly. Leave area open to air (apply no dressing unless ordered by physician).

10. **Percutaneous Endoscopic Gastrostomy (PEG) Tube Care**

**Staff Responsible**: Registered Nurse/Licensed Practical Nurse

- Measure length of tube every shift.
- Clean Percutaneous Endoscopic Gastrostomy (PEG) entry site with prescribed agent.
- Re-tape/change Percutaneous Endoscopic Gastrostomy (PEG) tube tape every day and prn.
- Assess Percutaneous Endoscopic Gastrostomy (PEG) site and tube every shift.

11. **Administration of Enteral Medications**

**Purposes**: To administer precise doses of prescribed medication; to prevent obstruction of an enteral tube.

**Staff Responsible**: Registered Nurse/Licensed Practical Nurse

**Equipment**:

- Syringes sized to volumes of individual medications
- Graduated medicine cups
- Mortar and pestle or suitable substitute for crushing medications
- Administration syringe with catheter or syringe tip compatible with enteral tube connector
- Labeled medication containers
- Medication order, medication record, and Tube Feeding Record, Form 579, Attachment 5

**General Considerations**:

As with oral medication, verify the compatibility of drugs with each other and with feeding components.

Obtain liquid forms and dose-volume equivalents by physician order. Discuss with physician the substitution of drugs with like products available in liquid, chewable, or injectable forms. All solid medications must be finely crushed; chewable forms may be easier to crush.

Note the volume-required compatibility with fluid requirements or restrictions.

Insure clear labeling of suspensions that require thorough shaking to deliver an accurate dose.

Do not instill any capsule or particles of capsules into an enteral tube.

Avoid thickened solutions, fiber, or bulk formers because these expand in liquid and may obstruct tubes quickly.

Use enteric-coated tablets with precaution and physician awareness. Destroying the coating by crushing may affect resident tolerance of the drug. Enteric coatings are difficult to crush.
Administer medications with sufficient liquid (usually water) to:

- Enhance the utilization of the drug as recommended by the product literature.
- Dissolve or finely suspend particles of tablets.
- Flush the tube of residue.
- Reduce the osmolality of concentrated medications.
- Avoid over-distention of stomach or intestinal contents.

**Resident Education**: If appropriate, educate the resident as to the safe administration of enteral medications including potential problems or risks and side effects.

**Procedure**: Administration of Enteral Medications

<table>
<thead>
<tr>
<th>STEPS</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash hands and put on gloves.</td>
<td></td>
</tr>
<tr>
<td>Pour or draw up each liquid medication separately.</td>
<td>This prevents error in measurement and waste if discard is necessary.</td>
</tr>
<tr>
<td>Crush tablets into fine powder and remove thoroughly from container.</td>
<td>Dose may be affected by residue left on pestle or in mortar or spilled.</td>
</tr>
<tr>
<td>Check gastric residual if appropriate.</td>
<td>Aspirated gastric secretions may be useful for dissolving some medications; see gastric residual procedure.</td>
</tr>
<tr>
<td>Fit administration syringe to tube before unclamping tube, and fill</td>
<td>Air can cause gastric distention.</td>
</tr>
<tr>
<td>syringe partially with water.</td>
<td>Vigorous syringe pressure may rupture tube, especially small-diameter tubes.</td>
</tr>
<tr>
<td>Administer liquid medications first, and follow them with water.</td>
<td>Premixing in separate containers may lose some dosage. Agitation prevents particles from settling or clinging to syringe or plunger.</td>
</tr>
<tr>
<td>Mix crushed medications in syringe, which is partially filled with</td>
<td></td>
</tr>
<tr>
<td>water.</td>
<td></td>
</tr>
<tr>
<td>Flush contents of syringe and tube.</td>
<td></td>
</tr>
<tr>
<td>Re-clamp, plug, or reconnect tube to feeding.</td>
<td></td>
</tr>
<tr>
<td>Rinse syringes, mortar, and pestle and wipe free of medication traces.</td>
<td></td>
</tr>
</tbody>
</table>

Attachment 3
Page 18 of 24
Operating Procedure 150-15
Syringes may be reused for same resident only. They are labeled, dated, stored and discarded according to reuse protocol and infection control precautions. A mortar and pestle are usually used for more than one resident unless they must be confined to the resident. They must not be in contact with residents if multiple resident use is common. Follow medication documentation protocol. Document and report unusual circumstances or reactions to the administration of enteral medications.

<table>
<thead>
<tr>
<th>STEPS</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Syringes may be reused for same resident only. They are labeled, dated, stored and discarded according to reuse protocol and infection control precautions. A mortar and pestle are usually used for more than one resident unless they must be confined to the resident. They must not be in contact with residents if multiple resident use is common. Follow medication documentation protocol. Document and report unusual circumstances or reactions to the administration of enteral medications.</td>
</tr>
</tbody>
</table>

12. **Oral Care**

**Purposes:** To clean the teeth, tongue, and oral mucosa of debris and bacteria; to prevent mucosal bleeding and breakdown; to promote resident comfort.

**Staff Responsible:** Direct Care Staff

**Equipment:**
- Warm water
- Toothpaste or tooth powder
- Emesis basin
- Toweling
- Adequate lighting
- Soft-bristle toothbrush

**Optional equipment:**
- Bite block
- Half-strength peroxide
- Baking Soda
- Mouth swabs
- Water-pick
- Moisturizers
- Suction equipment
- Dental floss on a handled device
- Non-sterile gloves and mask

**General Considerations:**

Thorough oral hygiene is necessary at least twice a day for any dependent resident. For residents who are to receive nothing by mouth, who are mouth breathers, or who keep their mouths closed, frequency is increased to three or four times a day.

Oral hygiene provides sensory stimulation for arousal and comfort and promotes digestive stimulation and saliva production. It may also induce gagging or coughing. As such, it should precede feedings whenever possible.

Oral hygiene is vital to the promotion of personal interactions with staff or family. Poor hygiene can present a real social obstacle that deprives a resident of contact.
Avoid the use of acidic preparations, such as lemon, for stimulation or care because they promote deterioration of tooth enamel and can be noxious to tender tissue. Likewise, avoid sweetened or alcohol-based preparations.

Cold is also noxious to sensitive teeth and is a stimulant to swallow. Warm water is recommended.

Baking soda is an effective cleaner, deodorizer, and antiplaque agent recommended by some dentists. Water-picks are also useful.

Mouth moisturizers are used in adjunct to routine hygiene, especially for extreme dryness and accumulations. These include artificial saliva and lip balms. Glycerin and peroxide are drying agents but may be effective for cleansing accumulations; their use should be followed by rinsing and moisturizers.

Suction equipment and oral catheters must be available for residents at risk for aspiration or who cooperate poorly.

**Resident Education:** Educate the resident of the importance of oral hygiene and the procedure as appropriate.

**Procedure: Oral Care**

<table>
<thead>
<tr>
<th>STEPS</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash hands and put on gloves.</td>
<td></td>
</tr>
<tr>
<td>Explain procedure to resident.</td>
<td></td>
</tr>
<tr>
<td>Position resident upright with head flexed or in side-lying position.</td>
<td>This promotes ready drainage of oral contents and prevents aspiration.</td>
</tr>
<tr>
<td>Arrange emesis basin and sufficient toweling. Set up equipment, suction, and supplies within reach, and insure adequate lighting.</td>
<td></td>
</tr>
<tr>
<td>Open resident’s mouth, and visualize teeth, tongue and mucosa. Mouth opening is elicited by gentle head tilt, chin pressure, and jaw massage. Place bite block between back teeth if necessary. Remove mouth guard if present.</td>
<td>Bite blocks are not to be forced between teeth. It may be necessary to wait for relaxation or to elicit a yawn for mouth opening.</td>
</tr>
<tr>
<td>Gently brush all surfaces of teeth and top of tongue. Remove debris and excess fluid as it accumulates. If resident bites down on brush or swab, wait for relaxation and then remove.</td>
<td>Brush tongue lightly, and avoid provoking gag if possible. Never put fingers into resident's mouth between teeth! Yanking out brush or swab may cause injury or break handle, leaving a piece of brush in mouth.</td>
</tr>
<tr>
<td>Rinse with warm or half-strength peroxide (or both). Wipe or suction excess.</td>
<td></td>
</tr>
<tr>
<td>Reexamine mouth and teeth.</td>
<td>Open areas and dental abnormalities may be masked by secretions.</td>
</tr>
<tr>
<td>STEPS</td>
<td>ADDITIONAL INFORMATION</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Floss teeth if resident is cooperative, or floss can be attached to handled device for resident to use.</td>
<td>Broken floss can become trapped in mouth and aspirated.</td>
</tr>
<tr>
<td>Apply medication if ordered or moisturizers to oral mucosa and tongue.</td>
<td></td>
</tr>
<tr>
<td>Remove bite block.</td>
<td></td>
</tr>
<tr>
<td>Apply lip moisturizer.</td>
<td></td>
</tr>
<tr>
<td>Document care and observations.</td>
<td></td>
</tr>
<tr>
<td>Report to the physician any signs of breakdown, disrepair, or unstable dentition. Discuss modifications in care as required.</td>
<td></td>
</tr>
</tbody>
</table>

13. **Nostril Care**

**Purposes:** To preserve integrity of nasal mucosa by lubricating mucosa, and removing debris; to prevent mucosal bleeding and breakdown; to promote resident comfort; to improve airway patency.

**Staff Responsible:** Registered Nurse/Licensed Practical Nurse

**Equipment:**
- Soap and water
- Wash cloth
- Tissues
- Cotton swabs
- Flashlight
- Water-soluble lubricant

**Optional equipment:**
- Half-strength peroxide
- Adhesive remover
- Tape (hypoallergenic)
- Skin barrier
- Saline nasal spray
- Non-sterile gloves

**General Considerations:**

Particular attention to nasal mucosa is due when:

- Nasoenteric tubes are in place
- Nasal breathing is the primary route of respiration (resident keeps mouth tightly closed).
- Secretions are obvious and audible and resident cannot clear them on command.
Nostril care is performed at least daily and more often as indicated by resident characteristics, as above.

Schedule the procedure when the resident is relaxed and in an upright position and before feeding. Do not use petrolatum-based products or ointments. Oil droplet aspiration is possible.

**Procedure:** Nostril Care

<table>
<thead>
<tr>
<th>STEPS</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash hands and put on gloves.</td>
<td></td>
</tr>
<tr>
<td>Explain procedure to resident, and elicit cooperation.</td>
<td></td>
</tr>
<tr>
<td>If nasogastric tube is in place, remove tape and temporarily anchor it close to nose.</td>
<td>Caregiver or other staff can anchor tube and assist.</td>
</tr>
<tr>
<td>Cleanse external nares of tape, debris, oil and perspiration.</td>
<td>Adhesive removers must be thoroughly removed by soap and water to avoid irritation.</td>
</tr>
<tr>
<td>Examine internal nares with flashlight for signs of trauma.</td>
<td>Nasogastric tubes can cause pressure necrosis.</td>
</tr>
<tr>
<td>Lubricate several swabs, and wipe nostrils clear from back to front while visualizing with light. Use half-strength peroxide sparingly for crusted, adherent secretions. Rinse peroxide with saline or water.</td>
<td>Dried secretions may mask pressure areas, bleeding, or septal defects. Probing with swabs from front to back can drive secretions from pharyngeal airway to become aspirants or obstructions. Vigorous sneezing or gagging can dislodge a nasogastric tube or provoke emesis. Deep probing cannot be visualized and may cause trauma to pharynx.</td>
</tr>
<tr>
<td>Avoid probing beyond length of nostril.</td>
<td></td>
</tr>
<tr>
<td>Minimize procedure if resident is uncooperative or cannot be controlled.</td>
<td>Gentle head control and soft wrist restraint may be required. If so, another person should assist with this.</td>
</tr>
<tr>
<td>If ordered, use saline nasal spray at this point on dry external areas.</td>
<td>Saline spray used two to four times a day maintains mucosal moisture.</td>
</tr>
<tr>
<td>Clean and dry nasogastric tube.</td>
<td></td>
</tr>
<tr>
<td>Reposition nasogastric tube to avoid contact with nasal mucosa.</td>
<td>Tubing placed against mucosa causes pressure and possible necrosis.</td>
</tr>
<tr>
<td>Apply tape securely to tube, tab it for easy removal, and apply it to new site on nose, below nostril, or nearby on cheek.</td>
<td>Alternate tape sites to prevent irritation to skin.</td>
</tr>
</tbody>
</table>
Document nasal care, observations, and interventions. Report to the physician any unusual occurrence, and request a change in care as indicated.

14. **Enteral Feeding Pump**

**Staff Responsible:** Registered Nurse/Licensed Practical Nurse

**Procedure: Enteral Feeding Pump**

To prepare the flexi-flow companion enteral feeding pump for operation:

1. Attach the charge unit to the I.V. pole.
2. Make sure the pump is properly seated in the charger.
3. Plug in the cord where power is available (pump can be battery or electrically operated).
4. Fill the feeding container with the enteral nutrition product.
5. Suspend the container to the side or behind the pump so that the sight chamber is at or above level of the pump.
6. Squeeze the sight chamber one-third (1/3) to one-half (½) full.
7. Remove the cap at the distal end of the pump set tube. Compress the bellow of the cassette repeatedly (two [2] strokes/second) until fluid has expelled air from the cassette and tubing, leaving two to three (2-3) inches of tubing near the adaptor unprimed to avoid dripping during setup.
8. Attach the stopcock to resident's tubing.
9. Insert the cassette into the pump, using shape for orientation. Be sure to exactly match the shape of the blue plastic base of the cassette to the shape of pump cavity. Press until cassette is seated.
10. Access the pump control dial by pressing at "PUSH". Turn the dial to set "R T 5", and select flow rate from 5 to 300 mls. by pressing the individual arrows.
11. Turn the pump dial to "RUN" to start the feeding.

**Information:**

When desired, disconnect the pump set tubing from the resident's enteral feeding tube, release the cassette from the pump by pressing the release latch downward, and discard the set and container.

When the "Low Battery" message appears, the pump will run for approximately thirty (30) minutes before shutting down completely.

When fully charged, the pump can operate on battery power for approximately eight (8) hours.

A new pump should be plugged into an AC outlet for twelve (12) to fifteen (15) hours before initial use.
At the start of the feeding cycle:

Obtain new feeding set-up and write date on tubing tag. Tubing and syringes are changed every 24 hours by the 11-7 shift. The date and resident's name are written on the syringe sleeve.

Obtain feeding formula ordered for resident. Supply will be kept in resident's bedside storage area.

Complete feeding bag label.

Shake formula thoroughly before adding to feeding container. Pour no more than 240cc of formula into bag, or use premixed bag/bottle. Premixed bag/bottles should not hang longer than 24 hours. Squeeze and shake feeding container 2-3 times during shift.

Attach pump set securely to filled feeding container.

Suspend feeding container on I.V. pole above pump level.

Prepare pump set according to instructions.

Confirm proper placement of feeding tube according to procedure on page 3 of this attachment.

15. **Cleaning of Feeding Pump and Stands**

**Staff Responsible:** Registered Nurse/Licensed Practical Nurse

Unit 31 will develop a schedule for cleaning feeding pumps and stands.

At time of cleaning, pumps will be labeled with date, time, and initials of nurse cleaning pump.
GUIDELINES FOR TRIAL ORAL FEEDING

To Stimulate Swallowing During Trial Oral Feeding:

To stimulate swallowing during the buccopharyngeal stage of dysphagia:

♦ Encourage resident to think/talk about food just before mealtime (helps increase saliva flow and aids in chewing process).
♦ Do mouth care before eating. Suction prn.
♦ If resident is unable to keep food in mouth, if able, practice licking lips, puckering, humming, or whistling to strengthen mouth muscles.
♦ If jaws are clamped shut, press chin lightly with finger.
♦ If tongue is extended on feeding, put food on back of tongue.

To stimulate swallowing during the pharyngeal stage of dysphagia:

♦ Give resident ice chips to swallow for two to three bites prior to eating meal.
♦ Watch for elevation of larynx to insure resident is swallowing.
♦ Cue resident to hold breath if able to and swallow with each bite of food and also between bites to insure clearing of pharynx.
♦ Offer small spoonful of food and allow resident adequate time to swallow. May need to cue resident to slow down.

To stimulate swallowing during the esophageal stages of dysphagia:

♦ Position resident upright, high Fowler’s position in wheelchair.
♦ If in bed, elevate head of bed 45-90°, place two pillows behind shoulders and neck, and support arms with pillows as needed.
♦ Make sure resident maintains position throughout meal.

To Protect Airway From Oral Feeding and Aspiration of Own Secretions During Trial Oral Feeding:

Suction resident prn for secretions via trach/mouth.

Assess for and document signs and symptoms of aspiration: tachycardia/tachypnea, dyspnea and cough, cyanosis, rales, rhonchi, wheezes, pink frothy sputum or fever.

Set up safe environment for oral feedings. Important: stay with resident throughout feeding time.

♦ Refer to accepted dysphagia protocol listed above.
♦ Check tray to insure there are appropriate food items for resident’s level of dysphagia.
♦ Thicken soups and juices with a thickener to obtain appropriate consistency. Note: Obtain thickener from Dietary.

♦ Provide resident with quiet environment and privacy to promote concentration on swallowing.

♦ Set only one item of food in front of resident at a time.

♦ Sit in front of resident at midline.

♦ Instruct family and friends not to feed resident unless instructed first.

♦ Remove all sources of potential fluid intake from the room, i.e., water pitcher.

Leave resident in Fowler's position for 1 hour after feeding is completed.

Monitor and record episodes of coughing, i.e., frequency, time of event, type of food/drink.

Inform resident when changing food item.

**To Prevent Fatigability During Trial Oral Feeding:**

Schedule at least 30 minutes of rest before and after feeding.

Schedule minimum of one hour rest period in a.m. and p.m.

Allow 45 minutes to one hour for each meal.

If meal is lasting too long, try smaller meal at intervals throughout the day.

Assess and document resident's level of fatigue during feeding. If increased coughing occurs, may need to stop feeding and allow rest period.

**To Assist In Relieving Anxiety Related to Choking and Gagging:**

Assess and document overt behaviors of anxiety: refusal to eat, refusal to be suctioned and facial and body tension.

Encourage resident to verbalize/express anxiety before and after swallowing sessions.

Assure resident of your presence during all sessions.

Assure resident of your regular availability; answer call light promptly.

Maintain relaxing environment during mealtime; do not rush resident.

Prepare resident for changes in diet. Do not advance quickly.

Talk through and demonstrate with resident how to handle gagging/chooking episodes.

♦ Lower resident's chin to chest immediately.
♦ Flex body at waist.

♦ Clear mouth of residual food.

♦ Use suction/Heimlich maneuver if necessary.

Reinforce resident's progress and positive gains.
### TUBE FEEDING RECORD

**Date**
**Nursing Shift**
| D | E | N | D | E | N | D | E | N | D | E | N | D | E | N | D | E | N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
**Initials**

**Tube Feeding Order and Date**

<table>
<thead>
<tr>
<th>Formula</th>
<th>CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>CC</td>
</tr>
<tr>
<td>Saline</td>
<td>CC</td>
</tr>
<tr>
<td>Gatorade</td>
<td>CC</td>
</tr>
<tr>
<td>Prune Juice</td>
<td>CC</td>
</tr>
<tr>
<td>All Other Liquids</td>
<td>CC</td>
</tr>
<tr>
<td>Total Each Shift</td>
<td>CC</td>
</tr>
<tr>
<td>24 Hour Total</td>
<td>CC</td>
</tr>
<tr>
<td>Tube Placement Checked Every 4 Hrs</td>
<td></td>
</tr>
<tr>
<td>Head of Bed Elevated: ___ 45º ___ 90º</td>
<td></td>
</tr>
<tr>
<td>Rate of Flow Per Hour Checked</td>
<td></td>
</tr>
<tr>
<td>Residual Amount:</td>
<td>CC</td>
</tr>
<tr>
<td>Tolerance: Diarrhea</td>
<td></td>
</tr>
<tr>
<td>Nausea</td>
<td></td>
</tr>
<tr>
<td>Vomiting</td>
<td></td>
</tr>
<tr>
<td>Distention</td>
<td></td>
</tr>
<tr>
<td>Respiratory Distress</td>
<td></td>
</tr>
<tr>
<td>Ostomy Care:</td>
<td></td>
</tr>
</tbody>
</table>

**INSTRUCTIONS:** Record CC’s for liquid intake. Record both shift & daily totals. Sign & initial at bottom of form.


To be filed in the Flow Sheets section of the ward chart.

**ADDRESSOGRAPH:**

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**FOR PROFESSIONAL USE ONLY***

**FLORIDA STATE HOSPITAL, CHATTAHOOCHEE, FL 32324**

Form 579, (Revised) Dec 03

Office of Primary Responsibility: Nursing Management Team

FLORIDA STATE HOSPITAL

Attachment 5

Operating Procedure 150-15