FAST FACTS AND CONCEPTS #84
SWALLOW STUDIES, TUBE FEEDING, AND THE DEATH SPIRAL

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Introduction The reflex by families and doctors to provide nutrition for the patient who cannot swallow is overwhelming. It is now common practice for such patients to undergo a swallowing evaluation and if there is significant impairment to move forward with feeding tube placement (either nasogastric or gastrostomy) — see Fast Fact #128. Data suggest that in-hospital mortality for hospitalizations in which a feeding tube is placed is 15-25%, and one year mortality after feeding tube placement is 60%. Predictors of early mortality include: advanced age, CNS pathology (stroke, dementia), cancer (except early stage head/neck cancer), disorientation, and low serum albumin.

The Tube Feeding Death Spiral The clinical scenario, the tube feeding death spiral, typically goes like this:

1. Hospital admission for complication of “brain failure” or other predictable end organ failure due to primary illnesses (e.g. urosepsis in setting of advanced dementia).
2. Inability to swallow and/or direct evidence of aspiration and/or weight loss with little oral intake.
3. Swallowing evaluation followed by a recommendation for non-oral feeding either due to aspiration or inadequate intake.
4. Feeding tube placed leading to increasing "agitation" leading to patient-removal or dislodgement of feeding tube.
5. Re-insertion of feeding tube; hand and/or chest restraints placed.
6. Aspiration pneumonia.
7. Intravenous antibiotics and pulse oximetry.
8. Repeat 4 – 6 one or more times.
10. Death.

Note: at my institution, the finding of a dying patient with a feeding tube, restraints, and pulse oximetry is known as Weissman’s triad.

Suggestions
• Recognize that the inability to maintain nutrition through the oral route, in the setting of a chronic life-limiting illness and declining function, is usually a marker of the dying process. Discuss this with families as a means to a larger discussion of overall end of life goals.
• Ensure that your colleagues are aware of the key data and recommendations on tube feedings (see Fast Fact #10).
• Ensure there is true informed consent prior to feeding tube insertion—families must be given alternatives (e.g. hand feeding, comfort measures) along with discussion of goals and prognosis.
• Assist families by providing information and a clear recommendation for or against the use of a feeding tube. Families who decide against feeding tube placement can be expected to second guess their decision and will need continued team support.
• If a feeding tube is placed establish clear goals (e.g. improved function) and establish a timeline for re-evaluation to determine if goals are being met (typically 2-4 weeks).

References

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