In-Patient Feeding Challenges

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Feeding challenge

82 year lady with advanced dementia recovers from pneumonia but eats very little

She repeatedly pulls out IV drips and NG tubes over the next 3 months

Medical team recommend a palliative approach but family want a PEG tube

Family insist on repeated NG insertion and restrain their mother with taped mittens and sit by her bed for long periods holding her hands

This makes ward staff very uncomfortable

Gastroenterology team refuse to put PEG in as they feel its unethical

You are asked for a second opinion
Tube feeding in Dementia

Ethics and Evidence
Malnutrition in Dementia

• Weight loss and malnutrition are common in dementia

• It may occur at any stage of dementia (including before onset)
  – Very common in late disease

• Early stage dementia
  – Due to a mismatch between energy intake and expenditure

• Late stage dementia
  – Due to reduced intake
“Food refusal” in Dementia

- Patient doesn’t want to eat or doesn’t eat enough
  - may eat if encouraged / assisted by others

- Can occur with dysphagia or on its own

- Can mask depression but usually due to a lack of hunger and difficulty in feeding

- Occurs in mid to end stage dementia
Dysphagia in Dementia

• Patient unable to eat safely

• Increased risk of aspiration pneumonia and choking

• End stage dementia
Supplemental feeding

• Sip feeding

• Hand feeding

• Tube feeding
  • NG feeding
  • PEG feeding
Hand feeding

• Survival of demented and non-demented in LTC is equivalent with a program of careful feeding by hand

• Hand feeding is much more expensive than tube feeding and remuneration is less
Tube feeding

- PEG feeding much more effective than NG feeding at delivering calories
- NG tubes frequently blocked or dislodged and deliver only a fraction of the food delivered by PEG tube
- PEG feeding associated with a peri-procedural mortality of about 0-2%
Tube feeding in dementia

- A third of demented patients in US Nursing homes have feeding tubes

- Extensive regional variation (Maine 9% - Washington DC 64%)

- International variation in tube use by NH resident significant also
  - Ontario 15.0%
  - Missouri 4.6%
  - Iceland 1.3%
Tube feeding in dementia
the evidence

• Does it prevent aspiration pneumonia?
• Does it prevent other infections?
• Does it prevent the consequences of malnutrition?
• Does it improve survival?
• Does it prevent or improve pressure ulcers?
• Does it improve functional status?
• Does it improve patient comfort?

Does tube feeding prevent aspiration pneumonia?

• No evidence that it does
  

• Post pyloric placement of feeding tube isn’t any better than gastric placement
  

• Tube feeding affects oesophageal sphincters and increases colonisation of upper GIT and may increase risk of pneumonia compared to hand feeding
  
Tube feeding in dementia

• Does tube feeding prevent other infections?
  – No evidence / studies

• Does tube feeding prevent the consequences of malnutrition?
  – No evidence

• Does tube feeding improve functional status?
  – No evidence
Tube feeding in dementia

• Does it improve patient comfort?
  – Hunger and thirst rare in terminal patients

• Does it prevent or improve pressure ulcers?
  • No evidence that it does.
  – In FOOD trial (stroke) PEG feeding increased risk of pressure sores vs NG
Does tube feeding in dementia improve survival?

• No randomised trials to date

• Many observational studies with very poor survival in PEG fed patients regardless of diagnosis
  – 25% mortality at 1 month and 50% at 6/12

• Outcome in dementia probably worse
  – 50% mortality at 1 month and 75% at 6/12
Risks of tube feeding

• Aspiration pneumonia (0-66%)

• Tube occlusion (2-35%)

• Local infection (4-16%)
Summary of risk benefits

• Tube feeding in dementia does not appear to prolong life, prevent infection, or relieve suffering for the patient

• Tube feeding in dementia is associated with operative and peri-operative risks to the patient
Why does tube feeding in dementia happen then?

- Family factors
- Professional caregiver factors
- Institutional factors
Views of family and caregivers

• “No alternative”
  – Think it may prolong life and relieve suffering

– Can’t let them “starve to death”

– Can’t let their relative die
Views of professional caregivers

- “No choice”

- 34% of medical and 44% of surgical consultants believed that feeding and hydration should always be continued even if other forms of treatment were stopped and patient was terminal

Institutional considerations

- PEG feeding is cheaper than hand feeding
- PEG feeding is less labour intensive
- PEG fed patients are easier (than hand fed) to discharge from hospital /place in a nursing home
- USA
  - Better renumeration from Medicare/Medicaid (USA) for PEG fed patients

Which dementia patients get tube fed?

- **Patient factors associated with tube feeding**
  - Younger age,
  - Non-white race,
  - male sex,
  - divorced marital status,
  - lack of advance directives,
  - a recent decline in functional status,
  - and no diagnosis of Alzheimer disease.

- **Nursing home factors associated with tube feeding**
  - For profit NH
  - located in an urban area
  - having more than 100 beds
  - and lacking a special dementia care unit
  - a nurse practitioner or physician assistant on staff.

Ethical dilemma

• Patient benefits are very unclear

• Procedure has risks

• Patient’s ability to consent is reduced

• Main benefits are to others
  – (emotional / religious / financial)
Legal considerations

• Hand to mouth feeding is an ordinary intervention and cannot be withheld unless something else is put in place

• Tube feedings is an extra ordinary (or medical) treatment and can be withheld
  • Ireland, UK, California
Conclusions

• Feeding issues occurring late in the dementing process are usually an indicator that the patient is entering a terminal phase and available evidence suggests that tube feeding does not prolong life or prevent suffering.

• There is no evidence that tube feeding is any better than hand feeding though it is cheaper for the institution and associated with more risk to the patient.
Conclusions

• Decisions should be
  – made by the patient when competent
    • ? role of advanced directives
  – take into account the pre-existing wishes of the patient if available
  – informed by the evidence
  – Have input from the family if possible
  – Independent of the wishes / beliefs of the treating staff
  – Independent of financial considerations?


