CADTH
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CADTH Rapid Response
Report in Brief

Nasogastric Feeding Tubes Versus Percutaneous Endoscopic Gastrostomy for Patients With Head or Neck Cancer: A Review

Context

Cancer of the head or neck incudes a variety of malignant tumours, including those of the lip, oral cavity, tongue, salivary glands, pharynx, larynx, nasal cavity, ear, and skull base. Many patients with advanced stages of head or neck cancer who are undergoing chemoradiotherapy or radiotherapy cannot get enough nourishment from eating — either because of the acute toxicity of treatment, obstruction caused by the tumour, or both. Many begin treatment having already lost weight, and up to 80% lose additional weight during treatment. Poor nutrition is linked with poor prognosis.

Technology

Delivering nutrition directly into the stomach is considered the best option for patients with head or neck cancer who are undergoing chemoradiotherapy or radiotherapy. Nutrients can be brought to the stomach either through a nasogastric (NG) feeding tube inserted through the nose into the stomach or through a percutaneous endoscopic gastrostomy (PEG) inserted through the skin of the abdomen directly into the stomach.

Issue

Some controversy exists regarding which non-oral feeding method is the optimal one. A review of the clinical effectiveness, and the evidence-based guidelines, of NG feeding tubes compared with PEG for patients with head or neck cancer will help to inform decisions about nutrient delivery methods for these patients.

Methods

A limited literature search was conducted of key resources, and titles and abstracts of the retrieved publications were reviewed. Full-text publications were evaluated for final article selection according to predetermined selection criteria (population, intervention, comparator, outcomes, and study designs).

Key Messages

For non-oral feeding of patients with head or neck cancer, when comparing NG feeding tubes with PEG:

- There is not enough evidence to recommend one method over the other.
- Individualized treatment is optimal because patients' preferences vary:
  - PEG may be preferred because of its advantages (e.g., requires less time for feeding, looks less unsightly, carries a lower risk of nasal and sinus inflammation).
  - NG feeding tubes may be preferred because of the disadvantages associated with PEG (e.g., risk of decreased swallowing ability after long-term use, higher risk of complications).

Guidelines on non-oral feeding for patients with head or neck cancer do not recommend a specific feeding method.

A randomized controlled trial comparing methods for the non-oral feeding of patients with head or neck cancer undergoing chemoradiotherapy or radiotherapy is currently underway, with results expected in mid-2016.

Results

The literature search identified 480 citations, with 7 additional articles identified from other sources. After screening the abstracts, 9 studies met the criteria for inclusion in this review — 4 systematic reviews, 1 randomized controlled trial, and 4 clinical practice guidelines.

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