CASE STUDY

This case study highlights dietitian involvement with Mary, a 65 year old woman with metastatic lung cancer. This case study highlights the difficulties involved with nutrition support in palliative care and the importance of effective communication.

Admission details

Mary was admitted to the Peter MacCallum Cancer Centre on a Friday afternoon via transfer from another inpatient facility for radiation therapy (RT) to her lung mass and possible enteral nutrition (EN) via percutaneous endoscopic gastrostomy (PEG) insertion. Her lung cancer had grown and was obstructing her oesophagus leading to dysphagia. She had been unable to take any food or drink orally (NBM) for two days and was supported with IV fluids.

Nutrition issues on presentation

- NBM for two days and expected to continue – risk of malnutrition.
- Unable to insert nasogastric tube (NGT) due to obstruction. Plan for PEG insertion on Monday.
- No central line access, therefore unable to feed peripherally via total parenteral nutrition (TPN).
- IV fluids only for weekend. A peripherally inserted central catheter (PICC) to be placed on Monday.

Complications and nutritional dilemmas throughout admission

- On Monday, a fistula between oesophagus and bronchi was identified which changed Mary’s expected survival to approximately six weeks. This complicated RT planned for the obstructing lung tumour as there was a risk of worsening the fistula.

- The change in Mary’s prognosis and treatment plan added an ethical element to the decision for nutrition support. Current guidelines suggest that artificial nutrition support should not be commenced in a patient with expected survival of less than two to three months, which is the survival time of a completely starving subject. Intensive nutritional therapy close to the end of life is contraindicated. Subcutaneously infused fluids have been shown to be helpful in palliation for maintaining hydration status and preventing associated confusion (although requirements decrease as end of life approaches) and for administration of drugs.

- Multiple teams (surgical and radiation oncology) were involved in the management of this patient. The team considered the nutrition support options presented in Table 1 below.
### Table 1: Nutrition support options

<table>
<thead>
<tr>
<th>Nutrition support method</th>
<th>Concerns/contraindications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Unable to swallow food or fluids, high aspiration risk.</td>
</tr>
<tr>
<td>NGT</td>
<td>Unable to pass NGT due to obstruction.</td>
</tr>
<tr>
<td></td>
<td>EN is contraindicated if prognosis less than two to three months1.</td>
</tr>
<tr>
<td>PEG</td>
<td>The patient was deemed unsafe for insertion due to the obstruction limiting access via scope.</td>
</tr>
<tr>
<td></td>
<td>High surgical risk.</td>
</tr>
<tr>
<td></td>
<td>EN is contraindicated if prognosis less than two to three months1.</td>
</tr>
<tr>
<td>Laparoscopic-assisted PEG</td>
<td>High surgical risk and requires thoracic team present.</td>
</tr>
<tr>
<td></td>
<td>EN is contraindicated if prognosis less than two to three months1.</td>
</tr>
<tr>
<td>TPN</td>
<td>TPN is contraindicated in palliation and prognosis less than two to three months2.</td>
</tr>
</tbody>
</table>

### Patient goals and preference

Mary was aware of her prognosis and complications and realistic about what this meant for her and her family. Her ultimate goal was to be discharged home or to a facility closer to her home in regional Victoria. She was keen for PEG insertion if this meant discharge closer to home was more likely, however did not want this to delay discharge.

### Management and outcomes

- Mary received only three of the five planned fractions of RT. Mary and the team decided to cease due to additional risks when fistula was found to include both lungs.
- All feeding options were considered and discussed in multidisciplinary team meetings with nutrition, radiation oncology, surgical oncology and thoracic teams. A family meeting was then held with team members, Mary and her family to discuss options and formulate a patient-focussed plan.
- Mary decided that she did not wish to proceed with laparoscopic-assisted PEG – she decided on a prompt transfer to hospital closer to home for ongoing IV fluids and comfort care. It is quite unlikely that provision EN or PN nutrition support would have changed Mary’s outcomes and had the potential to delay discharge7.
- It was agreed that Mary could take food and fluids orally for comfort and enjoyment and she was made aware of the potential risks involved with this. Mary did not have much of an appetite, therefore was focussed on taking fluids to help moisten her mouth and food to enjoy the taste. The goals of nutrition for comfort were explained to Mary and her family by the dietitian and treating team.
- Mary and her family were educated on strategies to assist with xerostomia such as sucking on ice chips, lollies, mints or brushing her teeth to stimulate saliva flow; choosing soft and moist foods with extra gravies and sauces; sipping on fluids as desired; and she was provided with some artificial saliva for comfort.
- Education was provided to Mary and her family on selecting foods based on symptoms, comfort and personal preferences. Education previously provided on high energy, high protein diet (at previous inpatient facility) was relaxed with less focus on nutritional aspects of food and more on food.
enjoyment. Mary and her family were encouraged to engage socially in mealtimes as desired and to avoid solitary eating if preferred.

- Both Mary and her family were encouraged to phone the team with any concerns they had at home. They were well linked in with the Pain and Palliative Care team at Peter Mac.

Mary passed away just over one week later with some sense of control and dignity, in her preferred location, surrounded by her family.

References and Resources


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CareSearch Resources

There are resources within CareSearch that could help allied health professionals in the care and support of Mary. Some of them have been highlighted here:

- There are Systematic Reviews that include Dysphagia, Fluids and Hydration, Palliative Radiotherapy and Mouth care.
- There are PubMed Topic searches, on Artificial Nutrition, Dysphagia and on Multidisciplinary Teams.
- In the Allied Health Hub there is information on Managing Symptoms, Interdisciplinary Teams
- In the Nurses Hub there is information on ethical issues, including Nutrition and Hydration and Withholding and Withdrawing Treatment. There is also a page on Family Meetings.
- In the Clinical Evidence section there is a section on Patient Management and Family and Carer Evidence.
- In the For Patients, Carers, Families section there is information on At the End that may be helpful for the family when she is being cared for at home.