Artificial nutrition and rehabilitation for head and neck cancer patients in the community

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Advanced Specialist Head and Neck Dietitian, South London Community Head and Neck Team,
Outline

- The Head and Neck patient group
- The Community Head and Neck Team (CHANT)
- Nutritional implications and rehabilitation
- How Dietetics can have an impact
- Practicalities and challenges of community working
- Innovation for the future
The Incidence of head and neck cancer

- 8th most common cancer in the UK (2012)
- Oral cavity incidence has risen by 30% (1990-2006)
- Rates of cancers of the mouth & pharynx have risen by 20% over the last 30 years especially amongst the under 65’s.
- Generally higher incidence in poorer socio-economic groups.
- Prognosis depends upon the stage of disease at diagnosis.
- 90% of recurrences develop within the first 2 years following primary treatment.
- More than 70% struggle with physical side effects between one year and 10 years after treatment (MacMillan, 2008)
**Risk factors**

- Cigarette smoking
- Alcohol
- Virus (HPV, EBV) in younger population
- External radiation
- Genetic variation
- GORD

*(Cancer research UK and (NICE) (2004) Improving outcomes in head and neck cancer.)*
Malnutrition

- Malnutrition is a state of nutrition in which a deficiency or excess (or imbalance) of energy, protein and other nutrients causes measurable adverse effects on tissue / body form (body shape, size and composition) and function and clinical outcome.

- Malnutrition often goes unrecognised.
Malnourished?
Diet & Head and Neck patients

At “risk” population

• 40-60% of newly diagnosed head and neck cancer patients are malnourished. (Lees et al 1999)

• Malnutrition has significant impact on morbidity, mortality and quality of life for cancer patients

• Patients with head and neck cancer are at risk of malnutrition as a result of:
  - the site of their cancer
  - the disease process
  - the treatment (Beaver et al, 2001)

• Longstanding dietary habits and detrimental lifestyle factors such as alcohol misuse may predispose patients to malnutrition before they start treatment (Paccagnella et al, 2010)
Malnutrition in Head and Neck Patients

- Anxiety
- Alcohol use
- Tobacco use
- Poor dentition
- Obstruction of aerodigestive tract
- Trismus (lock jaw)
- Swallowing difficulties
- Radiotherapy:
  - mucositis,
  - dysgeusia,
  - xerostomia,
  - pain
  - thick secretions
- Chemotherapy:
  - nausea
  - vomiting,
  - GI disturbances

Nutritional Consequences

- Mental deterioration
  - Depression
- Impaired muscle function
- Impaired lung function
- Poor wound healing
- Ability to fight infection
  - Loss of muscle mass
- Mobility & Independence
  - Tumour Induced derangements
    - Altered metabolism of CHO, fats & protein
    - Abnormal levels of neurotransmitters leading to anorexia
    - basal metabolic rate
    - Cytokine mediated

↑ treatment toxicity
↓ treatment tolerance
↓ QOL
↓ life expectancy
Side effects slides of Treatment - Surgery

- Permenant anatomical changes
- Trismus
- Dental clearance
- Reduced tongue movement
- Permanent swallowing problems
Side effects slides of Treatment - Chemotherapy

- Vomiting
- Constipation
- Taste changes
- Loss of appetite
- Hiccups
- Plantar erythema
Side effects slides of Treatment

- Radiotherapy

• Mucositis
• Xerostomia
• Taste changes
• Dysphagia: long term feeding dependency
• Skin
• Thick secretions
• GI disturbances/bowel changes
• Nausea and vomiting
• Communication
• Loss of appetite

• Hearing/tinnitus
• Tooth decay
• Osteoradionecrosis
• Trismus
• Hypothyroidism
• Peripheral neuropathy
• Lymphoedema (neck)
• Late malignancy

showing we care
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CHANT: Who we are

Background

“Coordinated local support teams should be established to provide long-term support and rehabilitation for patients in the community. These teams will work closely with every level of the service, from primary care teams to the specialist MDT.” *(NICE Improving Outcomes Guidance 2004)*

- Multidisciplinary Head and Neck Specialist team
- Launched in 2010
- Ground breaking development: Initially a 3 year pilot project
- Now substantive service with Lewisham CCG as lead commissioner
- Directly commissioned by the 6 CCGs of SE London
- Multi source referrals
CHANT: Patient Cohort & Model of Service Delivery

- Patients referred on completion of treatment, or for shared care during treatment
- Single or multiple specialist needs
- Active Rehabilitation & Palliative Rehabilitation
- Local clinics in each of the 6 boroughs
- Community based clinics and domiciliary visits: 70:30 split
- Strong emphasis on training & support of community staff
CHANT Aims:

- To ensure that those living with and beyond cancer get the rehabilitation, care and support they need to lead as healthy and active a life as possible, for as long as possible

- To provide Head and Neck Specialist rehabilitation and support closer to home

- To provide a seamless service between acute and community care
- To provide specialist training opportunities to community staff & work in collaboration with community services to ensure patients receive holistic care

- To influence reducing length of hospital stay
- Decrease A&E attendance and hospital readmission
Cancer Rehabilitation Stages (Dietz 1980)

- **Preventative**: reducing impact of expected disabilities and improving coping strategies
- **Restorative**: returning patient to pre-morbid levels
- **Supportive**: in presence of persistent disease and need for treatment; rehab is aimed at limiting functional loss and providing support
- **Palliative**: prevent further loss of function, measures put in place to eliminate or reduce complications and to provide symptom management
CHANT: Patient Pathways

- Active Rehabilitation
- Post treat clinic
- Wellbeing
- Preventative
- Survivorship
- Palliative
- Supportive
- Non-curative
- Restorative
CHANT: Patient Referral Rate

• 1360 patient referrals received since 2010 (96% DT)

• 250 new referrals 2014 (400 head & neck diagnosis at Guys)

• Current caseload of 182 patients (175 DT)

• Referrals increasing year on year

• Referrals expected to continue to rise due to HPV
The Head & Neck Dietetic Team

**Acute**: 5.6 WTE & 0.5 WTE dietetic assistant
**CHANT**: 3* WTE

Referral Source
- Assessment & Diagnosis
  - Multidisciplinary Meeting
  - Diagnosis & Treatment Planning
  - Multidisciplinary Pre Treatment Assessment
  - Treatment
  - Follow up/ Surveillance
  - Rehabilitation & Survivorship

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Aim of Nutritional Intervention

• Prevent and treat malnutrition

• Improve health and wellbeing/QOL

• Enhance anti-tumour treatment effects

• Reduce the adverse effects of anti tumour therapies

(adapted from Arends et al., 2006)
### CHANT Dietetic Referrals

<table>
<thead>
<tr>
<th>Dietetic Referral</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Since 2010</td>
<td>1124 (96% of total ref)</td>
</tr>
<tr>
<td>Current caseload</td>
<td>175 (95% of total CHANT ref)</td>
</tr>
<tr>
<td>Current number of Enteral Nutrition support patients</td>
<td>Number of tubes 56 (~32%)</td>
</tr>
</tbody>
</table>
Acute to Community service: Opportunity cost of preventing malnutrition

- Weekly dietetic handover
- Traffic light system for prioritising patients
- MDM weekly
- Weekly oncology and surgical MDT
- Dietetic clinical lead
- Joint acute & community assessments
- Regular dietetic team meeting
- Standardisation of care across pathway
- Central referral and registration point for setting up home enteral feeds
Dietetic Intervention: Rehabilitation

Opportunity cost of preventing malnutrition

- Dietetic lead Post treatment clinic
- CHANT dietetic rehabilitation pathways
- Artificial nutrition support
  - Progressing from optimisation of tube to oral diet
- Management of late effects
- Palliative support
- Liaising with community and GP
Dietetic Intervention: Rehabilitation

- Multidisciplinary Assessments
- Identifying patients perceptions & concerns
- Patient centred goals
- Identifying barriers to oral intake
- Symptom management
- Nutritional counselling
Dietetic Intervention Rehabilitation

Oral nutritional support

- Relaxation of previous dietary advice
- Symptom control advice
- Meal pattern
- Food fortification & food preparation techniques
- Texture modification
- Oral Nutritional Supplementation
Dietetic Intervention – Rehabilitation: Artificial Nutrition support

- Registration
- Tube types
- Rehabilitation pathway
- Problem solving and Trouble shooting: Preventing admission to hospital
- Liaison with Hospital dietitians & Head and neck teams, community services
- Stream lining processes
Enteral Feeding Tubes
Common Enteral Tube Feeding Tubes

- Nasogastric tube (NGT)
- Nasojejunal tube (NJT)
- Gastrostomy tube (endoscopically, radiologically or surgically placed: e.g. PEG, RIG)
- Gastrojejunostomy tube (RIG-J, PEG-J)
- Jejunostomy tube
# Feeding Tube Statistics 2014

**n = 156**

<table>
<thead>
<tr>
<th></th>
<th>Curative intent</th>
<th>Palliative intent</th>
<th>Late effects</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>PEG</td>
<td>20</td>
<td>0</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>RIG</td>
<td>55</td>
<td>15</td>
<td>3</td>
<td>73</td>
</tr>
<tr>
<td>RIG-J</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Open gastrostomy</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Jejunostomy</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NGT/NJT (discharges)</td>
<td>42</td>
<td>11</td>
<td>5</td>
<td>58</td>
</tr>
<tr>
<td><strong>Total Number of insertions</strong></td>
<td><strong>119</strong></td>
<td><strong>26</strong></td>
<td><strong>11</strong></td>
<td><strong>156</strong></td>
</tr>
</tbody>
</table>
The Ideal

Tube to Table

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## Gastrostomy Tube Retention Rates for 2012-2013

<table>
<thead>
<tr>
<th>Reason for tube retention</th>
<th>Gastrostomy</th>
<th>NGT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspiration</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Converted to gastrostomy</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Disease progression leading to aspiration</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Slow to rehab</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Number of tubes retained at 12 months</td>
<td>2(3.9%)</td>
<td></td>
</tr>
<tr>
<td><strong>National retention rates (16-20%)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Managing Tube Problems

CHANT

Tube Problem
• Patient advised to call CHANT (9-5pm)
• OOH attend local A+E & use nutrition company hotlines

Triage
• Dietitian problem shooting & contact Nutrition nurses

Communicate
• Radiology team
• Gastro teams
• Oncology
• Dietitians

Acute

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Challenges of Managing Tube Problems

- No formalised pathway
- Dietetic on-call triage service
- Patients advised to attend their local A+E with tube related problem
- No quick fix solution
- Patients want to return to Guys and ST Thomas’ hospital
Dietetic Intervention: Survivorship

- Living with and beyond cancer: managing consequences / symptoms / impairment
- Improving physical and psychological performance
- Maximising oral intake and social aspects of enjoyment around food
- Return to work and vocational rehabilitation
- Empowered to self manage
- Education: Food groups & Wellness days
- On-ward referral
Opportunity cost of preventing malnutrition

- Streamlined systems
- Regular specialist dietetic input
- Active rehabilitation
- Improved nutritional status
- Patients homes
- Reducing hospital admission
- Support for other Community dietitians & staff
- Joint working with other Community Professionals
- Prevention i.e. Increasing awareness, Healthy Eating, Health promotion
Challenges: What's Next

• Growing caseload

• Innovation and different approaches

• Changing patient demographics

• Patient lead teaching – facilitation

• Eating support groups

• Service development & audit
Patient Feedback

• “I was very pleased with the service I got and think it is a wonderful idea to have a team in the community. Many, many thanks to you all”

• “this was an excellent service provided by experienced professionals in the head and neck field of play. I am a happy customer!”

• “I have no reason whatsoever to question the service I received from CHANT. It was excellent and I personally don't see how you can improve on excellence”

• “I wanted the experience/treatment/discussion to be as much part of my ordinary life as possible. There is already a lot of hospital visits around cancer”

• “When I felt very unwell it was lovely to be able to have someone come to me, rather than have another tiring journey like I did for chemo and radiation. It felt personal and therapeutic”
Patient Comments

Case 2

I saw the dietitian at my local clinic, I found it very useful giving me goals and encouragement to get me back eating healthily.

Felt the team helped me to regain my confidence. They also gave me lots of information & tips to manage my recovery competence, helpfulness and general friendliness of team.
I feel that the care I have been given has been very good. Excellent advice.

The advice given is very helpful. Any tips to help with my recovery are always welcomed and much appreciated.

They provided vital support at a difficult time. Very helpful and kind.

Follow up treatment after operation caring, understanding, compassionate approach to, sometimes, very difficult issues.

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I have been looked after so well from every aspect, I have nothing but praise for the staff. Expert care and was back to work in 3 months. Helpful for giving information and strategies to aid recovery. After care is ESSENTIAL after treatment. Because of care and attention and always ready to help. Wonderful service. Very kind person.
I was given good advice about to be on a good diet to help me to have a bit of nutritious food etc. Look after my health properly.

Very thorough professional
Empathy, caring and considerate

You come here as you look after me
Help me gain some weight

They help you through healing
And give you support
Plus they are nice and friendly

Good advice
Very helpful information
Encouragement
LH.CHANT@nhs.net
020 3049 2350
Evidence based guidelines

• 3 key guidelines:
  • Improving Outcomes in Head & Neck Cancer
    • (November 2004)
  • COSA Evidence based practice guidelines for the nutritional management of adults with H&N Cancer
    • (April 2011)
  • BAHNO Multidisciplinary Management Guidelines (Nutrition Chapter 8)
    • (September 2011)