

# Oral care for maxillo-facial oncology patients

Carolyn Joyce, Staff Hygienist  
Cardiff Dental Hospital

All Wales Special Interest Group  
October 9<sup>th</sup> 2009  
Llandrindod Wells

# AIM

To describe the role of the  
Dental Hygienist  
in the  
Maxillo-facial Oncology Team

# Discuss

- The contribution the Dental Hygienist in the Multi-disciplinary Oncology Team
- Theoretical and practical aspects of training programmes

# Mouth cancer, UK (2004)

- 7,697 people had mouth cancer
- Mortality rate 50%
- 2,718 deaths in 2005
- Kills one person every 3 hours in UK
- Rising number of younger people affected
- 25% of young people have no significant risk factors

# Patient's Care Pathway

Assessment & Diagnosis



Pre-surgical



Immediate pre & post-surgical



Follow up / On-going care

# JOINT CLINICS

- Joint clinics have arisen from the pressure from the Royal College of Surgeons desperate to avoid a repeat of such incidents that occurred in Bristol
- RCS recommends that individuals are seen by Specialists with an interest in head and neck cancer

# PRE-SURGICAL

- When surgeon and hygienist try to build a relationship with the patient
- First point of contact as soon as relevant, following diagnosis
- Takes place in Joint Head & Neck Clinic

# PRE-SURGICAL

- Early contact vital to reduce treatment complications
- Establish 'life-long' relationship
- Complete oral assessment
- Establish dental fitness



# PRE-SURGICAL

- Work closely with Restorative Dentist
- Optimise oral condition for surgery
- Provide optimal healing
- Assessment should include radiographs of teeth & jaws (Fayle et al, 1992)

# Pre-Surgical

- First tier role of Dental Hygienist

- Oral hygiene

- Liaise with restorative team

- Scale and polish

- Preventive advice & treatment

- Re-enforce oral hygiene

- Life-style advice

**What can we do together, to keep your mouth healthy?**

The Dental Hygienist will be available at various times, either on Ward A5 North (surgery) or at Velindre Hospital (radiotherapy). She is there to give you practical advice on how to maintain a good standard of oral hygiene and will also review you regularly.

The Hygienist assigned to the maxillofacial team is Carolyn Joyce. She can be contacted regarding dental advice, appointments etc. on

**(029) 2074 2443(029) 2074 2476**

**In the meantime, you can help by keeping your mouth as clean as possible:**

- Brush teeth really well twice a day with a small, soft toothbrush and a fluoride toothpaste.
- If you have dentures, take them out and brush them under water with a soft toothbrush with a denture cleaner. You should clean dentures over a basin half filled with warm water to minimise the risk of damage if you drop them.
- Rinse dentures after every mealtime.
- Soak dentures in specialist denture cleaner, following the manufacturer's instructions.

THE HEAD & NECK CLINIC  
SUITE 9

TUESDAY MORNING CLINIC

THE ROLE OF THE  
MULTIDISCIPLINARY TEAM

CAROLYN JOYCE  
DENTAL HYGIENIST EDH

# IMMEDIATE POST SURGERY

## Intensive Care Unit

- Feeding regimes: Nil by mouth  
NG tubes  
PEG feeds
- Dry mouth: Intubation  
Side effects of medication
- Build up of detritus and bacteria putting wounds and grafts at risk

# Immediate Post-surgery Intensive Care Unit

- Oral hygiene vital for wound care
- Reduced manual dexterity post-op
- Nursing staff providing oral care
- Dental Hygienist input is crucial in post-surgical care & staff support with OH

# Aids to Oral Hygiene

- ASPIRATING  
TOOTH BRUSH

- PROPS

- PROPS

# Objective on Return to Ward

- Re-establish / regain of oral function
- Maintain healing environment
- Promote swallowing and speech skills
- Liaison with: Dietitian  
Speech Language Therapist  
Nursing staff

# Principles

- Establish a pattern of appropriate care right from the onset of the post operative period
- Provide Oral Care information as an integral component of general care  
(Peterson & Sonis, 1982)



# Oral hygiene advice

- Realistic and simple advice
- Preventive advice
- Emphasis on the value of maintaining oral comfort during treatment
- Better compliance

# Oral hygiene information

## Oral Hygiene

**You should have already met the Dental Hygienist assigned to the team, and you may have already had a dental check up which may have included a scale and polish and advice on oral hygiene.**



It is very important that oral hygiene is continued to a high standard, especially after your operation which may involve grafts inside the mouth. This not only helps with good healing, but also with general wellbeing.

Oral hygiene need not be difficult or time consuming, and at first the Nurse or Hygienist who will be

looking after you will help carry out oral hygiene for you. This will help to keep your mouth clean and moist.

You will be provided with your own soft toothbrush (Tepe Specialcare). It is designed to be used after a surgical procedure in the mouth, as it is very soft.

Pink Foam Swabs

Chlorhexidine Mouthwash 0.2%

You will soon be encouraged to carry out or to take part in your own oral care if at all possible.

The most important Oral Hygiene measure if you have your own teeth is:

### **Tooth brushing**

This should be carried out at least twice daily. Use your soft toothbrush and fluoridated toothpaste. If you have difficulty swallowing or rinsing, just rinse your toothbrush. We can try a non foaming alternative such as Chlorhexidine gluconate gel.

### **Maintain cleanliness of gums, tongue, graft etc.**

Clean gums etc with water/mouthwash and moistened foam sticks at least four times a day, or as needed. Toothbrushes are much better than foam swabs at removing plaque debris from teeth, however foam swabs are used to clean the graft etc.

### **Mouthwash (Chlorhexidine 0.2%)**

This should be used twice daily, rinsed around the mouth. If you have difficulty swallowing, wait for review by speech and language team before rinsing with liquids.

For any advice please ask the Nursing staff or a Dental Hygienist

**Carolyn Joyce**

Dental Hygienist

# POST SURGERY FOLLOW UP

## Joint Head & Neck Clinic

- 60-80% require radiotherapy
- Approx 40% chemotherapy
- Vital to provide a secure dental environment

# ORAL COMPLICATIONS OF RADIOTHERAPY

- MUCOSITIS
- ULCERATION
- CANDIDOSIS
- XEROSTOMIA
- RADIATION CARIES
- DENTAL  
HYPERSENSITIVITY
- PERIODONTAL  
DISEASE
- LOSS OF TASTE
- TRISMUS
- OSTEORADNECROSIS  
AND IRRADIATION  
ASSOCIATED  
OSTEOMYELITIS

# During Radiotherapy

- Risk of uncontrolled dental disease
- Regular oral assessment
- Maintain oral hygiene
- Fluoride therapy
- Advice on denture wear
- Relieve xerostomia , mucositis etc

# MUCOSITIS

- Mucosal erythema
- Sloughing
- Ulceration
- Considerable discomfort
- Dysphagia and oral soreness become maximal 2-4 weeks after radiotherapy begins but usually subside in a further 2-3 weeks post therapy

# MUCOSITIS AND ULCERATION

- Warm saline mouthwash
- Difflam (benzydamine hydrochloride) used prior to meals is effective in alleviating mild to moderate mucositis for some patients
- Gelclair
- Mugard new product

# Xerostomia

- Common side effect of radiotherapy even when saliva glands are protected
- Can be permanent
- Has a detrimental effect on oral tissues



# RELIEVE XEROSTOMIA

- Advise high moisture foods
- Avoid spicy foods
- Fluids with meals
- Saliva substitutes - Saliva orthana, Luborant both contain fluoride, Oral Balance saliva replacement gel
- Application of flavourless salad oil or dietary fat at night time lubricates the lips and tongue
- Sugar free chewing gum stimulates saliva production eg Orbit

# RELIEVE XEROSTOMIA

- Advise high moisture foods
- Avoid spicy foods
- Fluids with meals
- Saliva substitutes - Saliva Orthana, Luborant both contain fluoride, Oral Balance saliva replacement gel, Glandosane
- Application of flavourless salad oil or dietary fat at night time lubricates the lips and tongue
- Sugar free chewing gum stimulates saliva production eg Orbit
- Prevention - Duraphat 2800

WATER

=

Best saliva substitute

# Radiation Caries and Dental Hypersensitivity

- Increase in a softer cariogenic diet
- Soreness of the mouth and loss of taste
- Oral hygiene becomes more difficult

# Osteoradionecrosis

- Complications include:
  - Uncontrolled periodontal disease
  - Ill fitting dentures
  - Immuno-deficiency
  - Malnourishment
- Life-long & long-term
- Poor healing
- Intractable infections

# Osteomyelitis

- Pain
- Trismus
- Exposed bone- sequestration
- Pathological fractures
- Halitosis
- Life threatening

# Post Surgery Follow-up

- On-going patient education
- Share Skills practical and social
- Develop extended duties:
  - Support groups
  - Charity work
  - Educational talks

# Summary of role of DH

- Liaison with MaxFax Team
- Attendance at MDT meetings
- Regular ward visits
- Pre & Post-operative observation & treatment
- Education



# Public education

- Life-style factors
- Early detection
- Can improve outcome from 50% to nearer 90% survival rate
- Late detection results in poor prognosis
- Poor 5 year survival rate

# Education is key to success

- Dental Care Professionals
- Nursing staff
- Dietitians
- Speech & Language Therapists
- Clinical Nurse Specialists
- Recommend BSDH Guidelines

# Nurse Education

- Ward based teaching
- Formal training programmes
- Hands on tuition on the ward
- Role of the nursing team important to assist with oral care interventions
- Maintain effective teamwork

- The DH plays a very important role in the continuing care of the oral cancer patient but also in providing much needed support throughout all aspects of treatment
- The role may extend beyond the clinical setting and could encompass the social and psychological demands which are increasingly put upon clinicians undertaking the treatment of malignancy

# Conclusion

- Dental Hygienist is a key team member
- Oral hygiene and Dental Health
- Well being, wound healing and oral function
- Teaching
- Extended into supportive roles

THANKYOU  
for  
Listening!!

Griffiths & Boyle (2005)  
Holistic Oral Care

Joyce & Crean (2002)  
What Does The Dental  
Hygienist Have To Offer The  
Oncological Maxillofacial  
Surgeon. Dental Health  
2002; 41: 5-6.

BSDH Guidelines for the Oral  
Management of Oncology  
Patients Requiring  
Radiotherapy, Chemotherapy  
and Bone Marrow  
Transplantation. J Disabil &  
Oral Health. 2001; 2: 3-14  
[www.bsdh.org.uk](http://www.bsdh.org.uk)