The Effectiveness of the use of mouth bites in Radiotherapy

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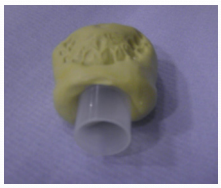
Introduction

- Research project part of a Masters programme
- Aim to complete end of 2011
- Study aimed at trying to find out how effective the tongue is immobilised during treatment

The Mouth Bite



Background

- The tongue is a very mobile structure
- Mouth bites are used to immobilise and depress the tongue and keep the mandible in a stable position and the hard palate out of the treatment field (Hollows et al, 2001)
- Good immobilisation needed with dose escalation
- Limited literature in this area

Literature Review

- Literature search highlighted limited literature
- Most focus on stereotactic or IMRT techniques, which use a bite block system (Baumert et al, 2005; Willner et al, 1997)
- Some related articles on movement of mandible and cervical spine (Ahn et al, 2009; Suzuki et al, 2006; Zhang et al, 2006)

Research Aims

- To assess how the mouth bite and tongue may vary over the course of a treatment
- To explore what factors may impact upon mouth bite position during treatment
- Primary research question - Does the mouth bite move during the course of the treatment in relation to the original position at simulation?

Research Aims

- Secondary research questions
  - Tongue Position throughout treatment
  - Identify trends in any movement
  - Do side effects influence position of mouth bite?

Methodology

- Mixed method approach
- Eligible patients identified at pre-treatment stage
- Inclusion criteria
  - Radical
  - Head and Neck
  - Mouth bite
- Information given
- Informed consent obtained

Methodology

- Patient given first questionnaire
- Orthogonal images taken during treatment
- Portal images reviewed
- Data recorded and analysed
- Weekly questionnaires and images until completion
- Weight and volume of mouth bite recorded

Progress to date

- Proposal accepted by university
- Full LREC and R and D approval gained
- CoRIPS funding awarded
- 2 patients recruited to the study
- Data collection started

Personal Experience

- New experience – steep learning curve!
- Progress slower than expected
- Recruitment issues
- Support from research group
- Feedback

Acknowledgements

- CoRIPS
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  - Cathryn Wood – Supt Research Radiographer
  - Work colleagues
- Ethics committee
- R and D department

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Thank you for listening
Any questions or comments...?

Snowdon