



## List of Research Projects Funded and Supported by HaNC

Over recent years, HaNC has funded research projects across a wide range of head & neck cancer issues. The following examples illustrate the diversity of the research programmes that has been funded:

- **Genome Study**  
HaNC funded this pilot study to target sequence DNA of Head & Neck Cancer tumour samples to support an application for a larger study. The work, carried out by The University of Liverpool (Cancer Research Centre) aimed to determine whether gene mutations affect the outcome of Head & Neck Cancer treatment. Some patients respond better to treatment and the research aimed to ascertain reasons for this and to identify potential targets in individual patients in order to personalise treatments to optimise outcome and minimise side-effects.

- **Osteoradionecrosis Study**  
Osteoradionecrosis is a devastating long term consequence of radiotherapy treatment for Head & Neck Cancer. The formation of a non-healing ulcer can lead to severe functional and cosmetic outcomes including pain, poor function, and possible jawbone replacement.

HaNC funded a study by University of Liverpool, (Cancer Research Centre) to attempt to identify common genetic variants and validate previous knowledge of causal genetic characteristics that increase susceptibility to Osteoradionecrosis. The aim being to design bespoke radiotherapy for individual patients to optimise the effective dose with minimal side-effects.

- **Late Presentation/Awareness Study**  
Delayed presentation of Head & Neck Cancer patients can have a significant impact on future treatment, severity of side-effects and ultimate outcome/quality of life. This study undertaken by the Department of Psychological Sciences at University of Liverpool and funded by HaNC, focussed on reasons for delayed presentation and investigated the factors influencing presentation time in Head & Neck Cancer patients.

The funding which included the recruitment of a PhD student resulted in a number of published papers. It is planned that the study will lead to the development of a public health campaign to address the problem of late presentation with consequent improvements in outcomes and quality of life for patients.

- **Patients Concerns Inventory (PCI) - Communication Issues Across the Socioeconomic Gradient**  
This post graduate research, also carried out by University of Liverpool (Department of Health Services Research), looked into the question of communication between clinician and patients from lower socio-economic backgrounds. This patient group can sometimes find it difficult to express concerns and seek help from professionals with resulting adverse impact on outcomes. The work examined the use of the Patient Concerns Inventory to test whether its use in clinic could help to mitigate this problem.

The Patient Concerns Inventory is a tool designed to improve communication during outpatient appointments. It is a touch screen based list which allows the patient to select concerns they wish to discuss at the consultation – More details of the PCI can be found on the HaNC web-page.

- **Tracheostomy Study**

Temporary Tracheostomies are routinely used following surgery for Head & Neck Cancer as a preventative measure to ensure that patient's breathing is not compromised. HaNC members identified that many patients reported a negative experience of Temporary Tracheostomies and so HaNC supported this study to investigate patients' experiences. The study by Edge Hill University, sought to identify patients' concerns and to better understand patients' perception and improve quality of care.

The study found that what is sometimes regarded as a routine procedure is not perceived as such by patients. Patients reported difficulties with communication and also fear of choking. A majority said they would avoid the procedure if possible. Patients felt that there was a lack of information prior to the procedure and felt that specialist assistance would help. The study supported a more tailored approach involving a risk stratification for use of TTs.

- **Advanced Cancer Study**

This study by Edge Hill University focussed on the cohort of Head & Neck Cancer patients with advance disease, undergoing radical treatment. The aims of this study were twofold. First, to explore patient and carer experiences of treatment, outcomes and decision making for patients receiving radical treatment with curative intent. Second, to identify factors to assist future decision making in cases where there is a choice between radical treatment with curative intent and palliation.

From this research HaNC produced a number of action points including improving quality of information given to patients, improving follow up care and disparities between inpatient and outpatient care. The action points were submitted to the Clinical Director of Head & Neck Service at Aintree NHS Trust. This HaNC funded research was instrumental in influencing the creation of a specialist clinical role at Aintree, to improve the patient experience in palliative cases. The role will provide specialist care in the patient's own locality and during critical moments. The role will also include an educational element.

- **Palliative Care Study**

HaNC provided funding to allow completion of this study of patients with advanced Head & Neck Cancer where curative treatment is not possible. The research was undertaken by the Marie Curie Palliative Care Institute (University of Liverpool). The work explored challenges facing patients, carers and clinicians dealing with Advanced Head & Neck Cancer. The researchers also investigated how existing services were used and how these might be improved.

- **Financial Impact of Cancer Diagnosis**

The HaNC Research Forum commissioned a study to investigate the financial impact on individuals. There was a lack of research data in this subject and members felt this was an important issue for patients. The study found that many Head & Neck cancer patients reported real financial hardship with half of those interviewed reporting that illness had caused a large or unbearable financial burden. The study led to the recruitment of a benefits adviser in the Head & Neck Centre at Aintree.

- **Head & Neck Cancer Workshop (9<sup>th</sup> February 2018)**  
HaNC supported and funded a workshop event hosted by Liverpool Cancer Inequalities Network. This organisation was established to foster, support and undertake research into socioeconomic inequalities in cancer outcomes. The event was attended by charities, academics, patients and carers to discuss inequalities in Head & Neck Cancer and to develop a research programme to understand and address these. Topics included earlier diagnosis, patient support and palliative support. The research into palliative care, funded by HaNC was presented and discussed.
- **HaNC Research Study Day (15<sup>th</sup> November 2019)**  
HaNC organised, funded and managed a Study Day, with the aim of bringing together with patients, surgeons, nurse specialists, dietitians and speech and language therapists, in order to discuss the latest developments in head & neck cancer research and establish the support that is available to patients.

*Dominic Macareavy (2020)*



## **Selected List of Head & Neck Cancer Research Papers Supported by HaNC**

***Anaemia and patient blood management in patients having neck dissections or free flaps for head and neck cancer.*** Rogers, S., Lowe, D., Horisk, K., & Groom, P. (2019). *British Journal of Oral and Maxillofacial Surgery*.

***The impact of the UK's two-week rule on stage-on-diagnosis of oral cancer and the relationship to socio-economic inequalities.*** Langton, S., Rogers, S., Lowe, D., Pluddemann, A., & Bankhead, C. (2019). *Journal of Cancer Policy*, 20.

***Incidence, timing, presentation, treatment, and outcomes of second primary head and neck squamous cell carcinoma after oral cancer.*** Rogers, S.N. & Swain, A. & Carroll, Conor & Lowe, Derek. (2019). *British Journal of Oral and Maxillofacial Surgery*.

***Health-related quality of life in patients with T1N0 oral squamous cell carcinoma: selective neck dissection compared with wait and watch surveillance.*** McDonald, C. & Lowe, D. & Bekiroglu, F. & Schache, A. & Shaw, R. & Rogers, S.N.. (2019). *British Journal of Oral and Maxillofacial Surgery*.

***Audit of the two-week pathway for patients with suspected cancer of the head and neck and the influence of socioeconomic status.*** Rogers, Simon & Staunton, A. & Girach, R. & Langton, S. & Lowe, D. (2019). *British Journal of Oral and Maxillofacial Surgery*. 57. 419-424.

***Management of anaemia and blood in patients having neck dissections or free flaps for head and neck cancer.*** Rogers, Simon & Horisk, K. & Groom, Peter & Lowe, D.. (2019). *British Journal of Oral and Maxillofacial Surgery*. 57.

***Importance of activity and recreation for the quality of life of patients treated for cancer of the head and neck.*** Rogers, Simon & Travers, A. & Lowe, D. & Levy, Andrew & Midgely, A.W.. (2019). *British Journal of Oral and Maxillofacial Surgery*. 57.

***Improving quality of life through the routine use of the Patient Concerns Inventory for head and neck cancer patients: a cluster preference randomized controlled trial.*** Rogers, Simon & Lowe, Derek & Lowies, Cher & Yeo, Seow Tien & Allmark, Christine & Mcavery, Dominic & Humphris, Gerry & Flavel, Robert & Semple, Cherith & Thomas, Steven & Kanatas, Anastasios. (2018). *BMC Cancer*. 18.

***Patients' experience of the monitoring of free flaps after reconstruction for oral cancer.*** Nazir, H. & Lowe, D. & Rogers, Simon. (2017). *British Journal of Oral and Maxillofacial Surgery*. 55.

***Is routine holistic assessment with a prompt list feasible during consultations after treatment for oral cancer?*** Rogers, Simon & Ahiaku, S. & Lowe, D.. (2017). *British Journal of Oral and Maxillofacial Surgery*. 56.

**Exercise program design considerations for head and neck cancer survivors.** Midgley, Adrian & Lowe, Derek & Levy, Andrew & Mepani, Vishal & Rogers, Simon. (2017). *European Archives of Oto-Rhino-Laryngology*. 275.

**Using the Patients Concerns Inventory for Distress Screening in Post-treatment Head and Neck Cancer Survivors.** Ghazali, Naseem & Roe, Brenda & Lowe, Derek & Tandon, Sank & Jones, Terry & Shaw, Richard & Risk, Janet & Rogers, Simon. (2017). *Journal of Cranio-Maxillofacial Surgery*. 45.

**Management of proliferative verrucous leukoplakia: Justification for a conservative approach.** Borgna, Scott & Clarke, Peter & Schache, Andrew & Lowe, Derek & Ho, Michael & McCarthy, Caroline & Adair, Stephen & Field, E & Field, John & Holt, Deborah & Risk, Janet & Rajlawat, Bijay & Triantafyllou, Asterios & Shaw, Richard. (2017). *Head & Neck*. 39.

**Mandibular reconstruction with vascularised bone flaps: a systematic review over 25 years.** Brown, J.S. & Lowe, D. & Kanatas, Anastasios & Schache, Andrew. (2017). *British Journal of Oral and Maxillofacial Surgery*. 55.

**Patients' experience of temporary tracheostomy after microvascular reconstruction for cancer the head and neck.** Rogers, Simon & Russell, L & Lowe, D. (2016). *The British Journal of Oral & Maxillofacial Surgery* 55.

**Is social inequality related to different patient concerns in routine oral cancer follow-up clinics?** Allen, Sarah & Lowe, Derek & Harris, Rebecca & Brown, Steve & Rogers, Simon. (2016). *European Archives of Oto-Rhino-Laryngology*. 274.

**Health related quality of life following the treatment of oropharyngeal cancer by transoral laser.** Rogers, Simon & Pinto, R. & Lancaster, Jeffrey & Bekiroglu, F. & Lowe, D. & Tandon, S. & Jones, T. (2016). *European Archives of Oto-Rhino-Laryngology*. 273.

**Development of a -specific patient concerns inventory and its use in the rheumatology outpatient clinic setting.** Ahmed, A.E. & Lowe, D. & Kirton, J.A. & O'Brien, Mary & Mediana, A. & Frankland, Helen & Kennedy, T. & Rogers, Simon & Moots, Robert & Bruce, H.. (2016). *Journal of Rheumatology* 43. 779-787.

**Influence of deprivation on health-related quality of life of patients with cancer of the head and neck in Merseyside and Cheshire.** Rylands, J. & Lowe, D. & Rogers, Simon. (2016). *British Journal of Oral and Maxillofacial Surgery*. 54.

**Where do patients treated for oral cancer die? A 20-year cohort study 1992-2011.** Kamisetty, A & Magennis, Patrick & Mayland, Catriona & Jack, Barbara & Lowe, D & Rogers, Simon. (2015). *The British Journal of Oral & Maxillofacial Surgery*. 53.

**Outcomes by area of residence deprivation in a cohort of oral cancer patients: Survival, health-related quality of life, and place of death.** Rylands, Joseph & Lowe, Derek & Rogers, Simon. (2015). *Oral Oncology*. 52.

**Rationale for conservative management of proliferative verrucous leukoplakia of the oral cavity.** Borgna, S. & Shaw, R. & Clarke, P. & Lowe, D. & Triantafyllou, Asterios & Rajlawat, B. & Holt, D.. (2015). *International Journal of Oral and Maxillofacial Surgery*. 44. e40.

**Longitudinal evaluation of health-related quality of life after osteoradionecrosis of the mandible.** Rogers, Simon & D'Souza, Jacob & Lowe, Derek & Kanatas, Anastasios. (2015). *The British Journal of Oral & Maxillofacial Surgery*. 53.

**United Kingdom nationwide study of avascular necrosis of the jaws including bisphosphonate-related necrosis.** Rogers, Simon & Palmer, Nikolaus & Lowe, D & Randall, Christine. (2014). *The British Journal of Oral & Maxillofacial Surgery*. 53.

**Frequency and outcomes of submandibular gland obstruction following resection of squamous cell carcinomas in the vicinity of the submandibular duct.** Wong, Dwh & Kamisetty, A & Lowe, D & Rogers, Simon. (2014). *Annals of the Royal College of Surgeons of England*. 96. 602-5.

**Screening for Distress and Unmet Needs in Post-treatment Head & Neck Cancer Survivors and its Impact on Supportive Care Services.** Ghazali, Naseem & Roe, Brenda & Lowe, Derek & Tandon, Sank & Jones, Terry & Brown, James & Shaw, Richard & Rogers, Simon. (2014). *British Journal of Oral and Maxillofacial Surgery*. 52. e87..

**Do head and neck cancer survivors attend a high street dentist on a regular basis?** Pace-balzan, Adrian & Butterworth, Chris & Lowe, D & Rogers, Simon. (2014). *The European Journal of Prosthodontics and Restorative Dentistry*. 22. 101-6.

**The influence of surgical margins on local recurrence in T1/T2 OSCC.** Barry, Conor & Ahmed, Ferhan & Rogers, Simon & Lowe, Derek & Bekiroglu, Fazilet & Brown, James & Shaw, Richard. (2014). *Head & Neck*. 37.

**Characteristics and referral of head and neck cancer patients who report chewing and dental issues on the Patient Concerns Inventory.** Mahmood, R & Butterworth, Chris & Lowe, D & Rogers, Simon. (2014). *British Dental Journal*. 216. E25.

**Place and time of death in patients treated with palliative intent for oral cancer.** Kamisetty, A. & Mayland, Catriona & Jack, Barbara & Lowe, D. & Rogers, Simon. (2014). *British Journal of Oral and Maxillofacial Surgery*. 52.

**Developing a protocol for gastrostomy tube insertion in patients diagnosed with head and neck cancer.** Habib, Syed & Ahmed, Suhail & Skelly, Rachel & Bhatt, Kavita & Patel, Bhaveshree & Lowe, Derek & Tuson, Julian & Rogers, Simon. (2014). *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology*. 117.

**Changing trends and the role of medical management on the outcome of patients treated for osteoradionecrosis of the mandible: Experience from a regional head and neck unit.** D'Souza, Jacob & Lowe, Derek & Rogers, Simon. (2014). *The British Journal of Oral & Maxillofacial Surgery*. 52.

**Analysis of time taken to discuss new patients with head and neck cancer in multidisciplinary team meetings.** Mullan, Barry & Brown, J.S. & Lowe, D & Rogers, Simon & Shaw, R.J.. (2013). *The British journal of Oral & Maxillofacial Surgery*. 52.

**The significance of the surgical margin for local recurrence and survival in early oral cancer.** Barry, Conor & Woolgar, Julia & Shaw, Richard & Rogers, Simon & Lowe, Derek & Bekiroglu, Fazilet & Brown, James. (2013). *British Journal of Oral and Maxillofacial Surgery*. 51. e94.

**Algorithm for management of the segmental mandibular defect based on 413 consecutive cases of composite flap reconstruction.** Barry, Conor & Kanatas, Anastasios & Brown, James & Rogers, Simon & Lowe, Derek & Shaw, Richard. (2013). *British Journal of Oral and Maxillofacial Surgery*. 51. e100-e101.

**Outcomes of oral squamous cell carcinoma arising from oral epithelial dysplasia: Rationale for monitoring premalignant oral lesions in a multidisciplinary clinic.** Ho, Michael & Field, E.A. & Field, John & Risk, Janet & Rajlawat, B.P. & Rogers, Simon &

Steele, J.C. & Triantafyllou, Asterios & Woolgar, J.A. & Lowe, D & Shaw, R.J.. (2013). *The British Journal of Oral & Maxillofacial Surgery*. 51.

**Post-treatment proximal oesophageal strictures in head and neck carcinoma.**

Ghazali, Naseem & Ullah, O. & Shaw, R. & Risk, Janet & Lowe, D. & Jones, T. & Rogers, Simon & Kapoor, N.. (2012). *British Journal of Oral and Maxillofacial Surgery*. 50. S35.

**Clinical determinants of malignant transformation in oral dysplasia.** Ho, Michael & Risk, J.K. & Liloglou, Lakis & Rogers, Simon & Field, E.A. & Rajalwat, B. & Lowe, D. & Shaw, R.J.. (2012). *British Journal of Oral and Maxillofacial Surgery*. 50. S18.

**A double blind, randomised, placebo controlled, feasibility phase III clinical trial of peri-operative immune-enhancing enteral nutrition in patients undergoing surgery for advanced head and neck cancer.** Ghosh, Samit & Dempsey, Ged & Skelly, Rachel & Shaw, Richard & Rogers, Simon & Lowe, Derek & Jones, Terence. (2012). *e-SPEN Journal*. 7. e107–e114.

**De-escalation of surgery for early oral cancer - is it oncologically safe?** Barry, Conor & Katre, Chetan & Pappa, Elena & Brown, James & Shaw, Richard & Bekiroglu, Fazilet & Lowe, Derek & Rogers, Simon. (2012). *The British Journal of Oral & Maxillofacial Surgery*. 51.

**Accuracy of MRI in prediction of tumour thickness and nodal stage in oral squamous cell carcinoma.** Lwin, Christine & Hanlon, Rebecca & Lowe, Derek & Brown, James & Woolgar, Julia & Triantafyllou, Asterios & Rogers, Simon & Bekiroglu, Fazilet & Jones, Huw & Wiesmann, Hulya & Shaw, Richard. (2011). *Journal of Oral Oncology*. 48. 149-54.

**Randomised controlled feasibility trial on the use of medical grade honey following microvascular free tissue transfer to reduce the incidence of wound infection.**

Robson, Val & Yorke, Janelle & Sen, Rachel & Lowe, Derek & Rogers, Simon. (2011). *The British Journal of Oral & Maxillofacial Surgery*. 50. 321-7.

**Adjuvant radiotherapy and health-related quality of life of patients at intermediate risk of recurrence following primary surgery for oral squamous cell carcinoma.** Bekiroglu, F & Ghazali, Naseem & Laycock, R & Katre, C & Lowe, D & Rogers, Simon. (2011). *Oral Oncology*. 47. 967-73.

**Safety of a regimen for thromboprophylaxis in head and neck cancer microvascular reconstructive surgery: Non-concurrent cohort study.** Blackburn, Tim & Java, K. & Lowe, D & Brown, J.S. & Rogers, Simon. (2011). *The British Journal of Oral & Maxillofacial Surgery*. 50. 227-32. .

**Reasons for delayed presentation in oral and oropharyngeal cancer: The patients perspective.** Rogers, Simon & Vedpathak, Shreya & Lowe, Derek. (2011). *The British Journal of Oral & Maxillofacial Surgery*. 49. 349-53.

**A survey of head and neck surgical oncologists regarding the inclusion of level IIb in a neck dissection of the node negative neck.** Rogers, Simon & Lowe, Derek & Paleri, Vinidh. (2011). *The British Journal of Oral & Maxillofacial Surgery*. 49. 230-2.

**Immune Nutrition in Head and Neck Cancer. A Double Blind Randomised Controlled Trial of Perioperative Immune Enhancing Feeds in Patients with Advanced Head and Neck Cancer.** Ghosh, Samit & Skelly, Rachel & Dempsey, G. & Lowe, D. & Rogers, Simon & Jones, T. (2010). *Clinical Oncology - CLIN ONCOL-UK*. 22. 900-900.