

Shadowing programme: April 2014  
Orofacial Pain Department  
University of Kentucky  
Lexington, Kentucky  
Francis O'Neill  
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## Background

Over the last 20 years in the US there has been a move to have the diagnosis and management of Orofacial Pain recognized as a dental specialty in its own right. The American Academy of Orofacial Pain (AAOP) was formed in 1975 and since then has grown to over 600 members. In 1993 the American Board of Orofacial Pain (ABOP) was formed with the purpose of offering a certified examination in Orofacial Pain and this is now in the process of being accredited by the Commission on Dental Accreditation (CODA) for advanced dental education programmes.

A submission to the ADA to recognize Orofacial Pain as a specialty is ongoing. The AAOP states that "The proposed specialty of orofacial pain includes diagnosis and management of patients with complex chronic orofacial pain disorders including neuropathic orofacial pain disorders, neurovascular orofacial pain disorders, chronic regional pain syndrome, complex masticatory and cervical neuromuscular pain disorders, primary headache disorders, pain from complex temporomandibular joint disorders, pain secondary to orofacial cancer and AIDS, orofacial dyskinesias and dystonias, orofacial sleep disorders, and other complex disorders causing persistent pain and dysfunction of the orofacial structures."

### Why Kentucky?

The University of Kentucky Orofacial Pain centre has been run by Professor Jeffrey Okeson for the past 25 years. It was the first accredited Orofacial Pain Residency programme in the USA, and has so far trained over 30 successful residents. Professor Okeson has written seven editions of the seminal text Bell's Orofacial Pain. He is President of the ABOP, past President of the AAOP and has been instrumental in attaining CODA accreditation status. Also present at the University of Kentucky is Reny de Leeuw, editor of the Guidelines for Assessment, Diagnosis and management of Orofacial Pain.

And of course the fried chicken...

## Location



## University of Kentucky Campus



## University of Kentucky Hospital



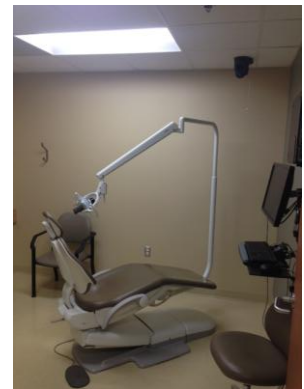
## Department of Orofacial Pain



## Reception



## 8 rooms



### Referral base

The Orofacial Pain Department of the University of Kentucky is situated in the city of Lexington, Kentucky and serves a local population of 308,000 people. However, as one of only twelve specialist orofacial pain departments in the United States the referral base is much larger and consequently the department accepts referrals from all states in the country. It also accepts international referrals and has treated patients from as far as New Zealand.

Patients are referred from both primary and secondary care providers and so performs a tertiary referral role.

The department now has a database with information on over 6,300 patients treated at the centre.

### Overall approach

This is based firstly on expert diagnosis.

This is aided by a full and exhaustive history and examination with multiple patient questionnaires prior to clinician assessment. Questionnaires included are pain, medication and previous intervention histories. Screening questionnaires for psychological disorders, PTSD, and sleep disorders.

Further history taking and clarification are undertaken in clinic along with a full head and neck examination including assessment of musculature, posture, extra-oral and intra-oral exam, TMJ exam, neurosensory testing, occlusal assessment, cranial nerves. This is performed by one of the resident trainees.

### **Patient flow and clinic set up**

8 consultation rooms some with video link.

Patients are given an initial 2½ hour appointment during which the first hour is filling out questionnaires.

Physician led history and examination are performed and the findings discussed with the on duty attending physician (usually overseeing four residents at one time). Special tests are either performed or ordered if necessary. All patients are seen by a psychologist at their first appointment and a recommendation made for further assessment if necessary.

A treatment plan is formulated and is provided directly by the department to patients in the surrounding area who are willing to travel to and from the clinic. Patients from further away are seen at an initial examination and a treatment plan is formulated and passed on to relevant practitioners in the patients' local area.

If treatment is started locally then a 45 minute review appointment is made and subsequent reviews as necessary.

### **Treatment modalities**

Treatments offered are wide ranging including:

Pharmacological treatments including –

Simple analgesia, treatments for Primary Headaches including TAC's, Migraine, Chronic Tension Type Headache etc. Neuropathic pain medication, anxiolytics and muscle relaxants

Medical interventions

Trigger point injections to sources of referred muscle pain (single or multiple sessions depending on response)

Opioids – prescribed only in the event of other therapies being unsuccessful and a trial period of opioids being therapeutic). Prescribed under a patient contract arrangement and a background check for previous patient drug abuse or dealing.

Psychological –

Multiple sessions of psychological therapy for the most part based on education and training in 'Patient Self-Regulation (PSR)'

Identification and initial management of Post Traumatic Stress Disorder in both children and adults

Identification of underlying psychological disorders or relationship problems and liaison with further services for targeted therapies

#### 'Patient Self-Regulation (PSR)

This takes the form of three sessions with a psychologist/trainee psychologist who introduces the idea that some elements of the condition are under the patients control and there are self guided strategies that when employed by the patient can significantly improve outcomes.

Physiotherapy –      Massage therapy  
                                  Postural stabilisation  
                                  Ultrasound  
                                  Iontophoresis – steroids

#### Sleep medicine –

Provision of sleep appliances to reduce/treat snoring and obstructive sleep apnea.

Also undertaken is screening of patients for general sleep problems as part of normal assessment. Patients found to be affected by sleep disorders are referred for further assessment with a sleep medicine physician.

#### **Scope of orofacial pain service delivery –**

This department provides expertise in diagnosis and initial management of wide range of conditions resulting in acute and chronic facial pain, encompassing conditions normally encountered by Neurology, neurosurgery, maxillofacial surgery, and psychology. Provision of initial conservative, psychological, physiotherapeutic and medical treatments for TMJ, myofascial/musculoskeletal pain, primary headaches, neuropathic conditions.

Referral for surgical management of neoplasia, TMJ, neuropathic conditions.

Referral to neurology of complex primary headaches unresponsive to initial therapy, or atypical presentations e.g. MS, strokes.

Referral to psychological/psychiatric services for management of complex psychopathologies including PTSD, substance misuse dependence (only possible because of screening).Referral to sleep medicine for further evaluation if necessary.

#### **Staffing**

The department has two full-time and four part-time attending (consultant) university employed oral physicians. One specializing in sleep medicine related to dentistry. Three academic/university employed psychologists  
One university employed physiotherapist. One full time receptionist and one full time clinic nurse.

## **Justification of psychology staffing**

Justification of Psychological services for orofacial pain patients.

1. Characteristics of patients.
  - 30% of orofacial pain patients meet criteria for anxiety
  - 30% of orofacial pain patients meet criteria for depression
  - one third have a diagnosable personality disorder
2. Psychological disorders are often undiagnosed and heavily impact upon treatment modalities and outcomes.
3. Psychologists are well positioned to facilitate behavioural change necessary in multiple orofacial pain conditions.

### **Weekly complex case discussion**



### **Teaching undergraduate students**



### **Physiotherapy student teaching**



### **Psychology case discussion**



## **Financing**

Payment for services are on a fee per item basis. These are charged to either the patient directly or to the patients' medical insurer if they have one. Initial appointments are universally covered by insurers but treatments are only covered if the provider is within the insurers network. If outside this network then treatment plan is provide by a networked provider.

Financial considerations of a specialist orofacial pain department -Due to long appointment times necessary for proper evaluation of chronic pain patients, clinical activity in this specialist area is not easily profitable but provision of services e.g. non-invasive appliances for sleep medicine help income stream in a private health care system. In NHS, savings could be derived from economy of scale. Additional income is also derived from educational/academic activities i.e. residency tuition fees \$14,500 each 4-6 per year, Mini residency courses \$1500 for one week with up to 50 international candidates each year, shadowing programme \$1000 per week with approx. 20 candidates per year. Share of tuition fees for psychology trainees 5-6 per year. Dental students do rotation through clinic as part of DDS education.

### **Education/Training**

At present 4 orofacial pain trainees (from a variety of dental backgrounds) on either a 2 year residency programme or 3 year masters programme. Increasing to 6 residents next year. Residents work towards examination and subsequent board certification with the American Board of Orofacial Pain. Although not yet recognized as a speciality in its own right, Orofacial Pain has recently been accredited by CODA. Robust experiential, continuous assessment, and exam tested training. Wide range of educational seminars, presentations and workshops. Experience of teaching undergraduates also (splints, pain history and exam). Over thirty residents have already gained Certification with the American Board of Orofacial Pain.

Short course training offered to wider national and international dental practitioners which increases knowledge base in the general practice community.

### **Psychology**

5 psychology students are currently on either a one year placement as part of rotation through specialties or on postgraduate further education training may do 2-3 years if MSc/PhD.

### **Physiotherapy**

Academic physiotherapist leads department training in focused orofacial pain physiotherapy. Part of overall training of physiotherapy students in University of Kentucky.

### **Evaluation/conclusion**

This programme was both personally and professionally rewarding. The organisation of the orofacial pain department studied is the result of over 30 years endeavour. The experience of this department has demonstrated directly translatable processes/practices which present NHS service provision in my region could immediately adopt to improve patient care. It has also provided insight into potential strategies for reorganisation, rationalisation and augmentation of service provision to enhance patient flow and for delivery of education. It provides an excellent comparator model with which to conduct analysis of our present NHS service and will hopefully drive improvement of future services for the betterment of both patients and clinicians.