Clinical Effectiveness Matters 2006

Issue No 14

Annual publication of the
Clinical Effectiveness Sub-Committee of the
British Association of Oral and Maxillofacial Surgeons

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Editorial — Ian Holland

Last year I ended my editorial with thanks to the regional coordinators who do the hard work in bringing together the annual report. This year is no exception my thanks to them and apologies for the delay in coordinating their efforts to get this to you. The report has grown again in size and if anything I am excluding more of what is submitted than in previous years. This continues to testify to the amount of work that is done year by year within departments and at regional level, which is clearly very considerable.

All of it addresses pertinent clinical issues with outcomes that can have a substantial impact on practice, improving services, patient pathways or saving revenue approximately £14 000 in one case! As in previous years some of you may find that the reports of the activity undertaken is either reported in a condensed form or simply noted as having been done. This is due to me trimming the reports I've received to fit the format of the report and ensure it doesn't become too long. The full versions of the reports submitted by the regional coordinators will be sent to BAOMS to be put on the website. If you still find what you have done hasn't reached me, please do contact me at my new email (ian.holland@sgh.scot.nhs.uk) with details of what you've done and where you are and I'll include your activity. My thanks to those of you who have done so in this year.

My thanks to the committee members for their continued help, you will see from the report that Steve Layton has taken over the chairmanship from Patrick Magennis, the latter especially continues to lend his help with the production of the report.

Finally I hope you find the report worthwhile reading and inspires you to continue the clinical effectiveness assessment that you are doing and maybe implement or look into areas other units have reported on with interesting findings.

Chairman's Comments — Patrick Magennis

Hardly a month passes without an e-mail coming my way from the Clinical Audit Department or the Clinical Governance Committee of my Trust about a new audit they require to meet the Clinical Negligence Scheme requirements or to demonstrate to our Primary Care Trusts that we care. Consent, side-marking, NICE, infection control (Saving Lives Tools), records, the list could fill this page. It is easy to feel overwhelmed.

It is refreshing to flick through C.E.M. and see how much "non-compulsory" audit it taking place in the face of these avalanches from above. Two of the main purposes of this publication are to avoid duplication of effort and to spark ideas. If an audit you are planning has already been done, why not make contact and learn from their experiences. If an audit here does not reflect your experiences, why not repeat the audit on your patch.

This co-operation can also help units deal with the 'compulsory' audits. We are all required to audit our compliance with NICE guidelines, but I am sure the way we do it will vary from unit to unit. Get in touch with your regional co-ordinator. Share ideas regionally or nationally.

I have been involved in the Clinical Effectiveness Sub-Committee for nearly 6 years as secretary then chair. I am very happy to pass the baton over to Stephen Layton although I will stay involved. Stephen has plans for the future to maintain this activity which represents important part of the charitable objectives of BAOMS and a useful tools for the membership as a whole.

At its core, whether it is called audit or clinical effectiveness, understanding what you do as a clinician and comparing it to a standard is really about the practice of good medicine is all about.

Eastern Region — John McKechnie

The Eastern Region meets for Regional Audit & Teaching four to five times a year at Newmarket & whilst regional activity has been patchy there has been considerable local activity in those centres not afflicted with consultant shortages or ill health.

Oldchurch Hospital Romford

Audit of Compliance of the Treatment of Children with Facial Lacerations with National Paediatric Policies
Dr Anitha Diwakar, Dr Priya-Ramakrishnan

Prospective pilot audit of consecutive patients aged 0-10 years who were treated for facial lacerations by Maxillofacial surgeons at Oldchurch hospital. The Paediatric policy states the required experience of the surgeons and anaesthetist and NCEPOD2 states the time of day during which the patient should be treated. The age of the patient, experience of the surgeon and the anesthetist, time of surgery were recorded. We also looked at delay to surgery. Results of the audit are presented.

Paediatric Policy

Children < 3 years of age anaesthetic and surgical services will be provided by consultant staff

Children between 3-10 years consultant staff must be informed nature of surgery and experience of trainee determines the presence of consultant on site trainees with less than 1-2 years of experience will need supervision by consultant

NCEPOD Recommendations
British national confidential enquiry into patient outcome and death demonstrates that mortality rate can be reduced by avoiding operations after midnight unless indicated, experienced anaesthetist and surgeon should undertake paediatric practice

Method

The study group consisted of 20 patients. 5 patients below 3 years and 15 patients between 3-10 years of age. Surgical procedure involved debridement and suturing of laceration under local or general anaesthesia. A questionnaire was used to evaluate the type, site of injury, experience of the anaesthetist and surgeon, time of surgery.17 patients were treated under general anaesthesia and 3 under local anaesthesia.

Delays to Surgery

Age	Total No of patients treated under GA	No of delayed patients	No of hours delayed
<3	5	3	15-24
3-10	12	2	15-20

Reasons for Delay in Surgery

50%- Other emergency operation

25%- Consultant anaesthetist not available

20%- Paediatric surgical list not available during day

5%- Surgeon not available to operate on emergency list during the day

Conclusions

Treatment of Paediatric facial lacerations was 55 % compliant with the paediatric policy, and 100% compliant with NCEPOD. Although all children received treatment before 23.00hrs there is still some uncertainty amongst the anaesthetists regarding compliance to NCEPOD of treatment between 23.00hrs and 24.00 hrs. To improve compliance and the delay to surgery more manpower and resources are required. It is not planned to re audit until there is a change in the staffing of the department.

An audit of the confidentiality of written job references before, during and after interview
Monique Ogadako

Peterborough District Hospital

Consent form for third molars . *R Sood*

A standard of administrative details and clinical complications was agreed by the department (based on 'Types, frequencies and risk factors for complications after third molar Extractions J Oral Maxillofac Surg 2003;61:1379-1389.')

These included all sections of the consent form being filled out correctly and dated and patients being informed of lip, chin and tongue numbness, swelling, infection, delayed healing, pain, bleeding, trismus, and retained roots.

Three audit cycles of 20 patients were undertaken. Constant improvements were made over the 3 audit cycles. By the third cycle all patients had the correct administration details recorded and all patients had pain and swelling complications recorded. Retained roots and delayed healing were recorded in less than 30% of patients whereas all other complications were recorded in more than 85% of patients. A teaching session at department SHO induction is proposed to improve standards of consenting patients.

Clinical Note keeping. *M Downing*

Note keeping for mandibular fracture cases treated as inpatients were audited according to the CRABEL score system (Ann R Coll Surg Engl 2001; 83:65-8) over 3 cycles. Average scores for all 3 consultants improved from around 86% to 95%. This audit supports the trust emphasis on good note keeping as part of risk management.

An audit of cost saving of new antibiotics and analgesia policy
S Abulhoul

Augmentin is commonly given as a prophylactic antibiotic for third molar removal. However, it has no proven benefits as a first line prophylactic antibiotic and it is 15 times more expensive than amoxycillin. Protocols were introduced where oral amoxycillin or metronidazole were given in cases where antibiotic prophylaxis for third molar removal was deemed necessary. Analgesic protocols were also standardised. Three cycles of audit were undertaken. In comparison to before the introduction of protocols, the estimated annual cost savings in our Day Surgery Unit after the third cycle of audit were £14000.

Ipswich & Colchester Hospitals

Audit of Two week wait for oral cancer referrals
Mr Anjan Shah .

Broomfield Hospital Chelmsford

Cervical lymphoadenopathy in Oral Cancer Patients: Efficacy of Clinical examination & imaging compared to Histopathology. A Mahmoud

Delays in the management of Oral Cancer patients from referral to treatment.
S Chandy

Efficacy of Consent for third molar Surgery
Akram El-Hadi

Basildon & Thurrock University Hospital

Theatre waiting times for fractured mandibles
John McKechnie

The notes of 32 patients treated for fractured mandibles between November 2003 and April 2004 were analysed. The average time from initial assessment to operation was two and half to three days with only 15% meeting National Benchmark Standards. This information has been used as evidence to support a trauma list.

West Anglian Network: (Luton & Dunstable Lister Hospital Stevenage Bedford Hospital Queen Elizabeth Hospital Welwyn Milton Keynes)

Patient information and consent survey for wisdom teeth.
Angela Clifford

Information leaflet: Do we need to do a survey on patient's satisfaction /understanding of the leaflet?

Standardized warnings on consent form and clinical notes. Need to be agreed by ALL consultants.

Suggested information: Pain, swelling, bruising, difficulty in mouth opening, bleeding, infection, temporary or permanent numbness or tingling of lower lip and chin and /or tongue, change of taste.

Perhaps printed on stickers to be put on consent form and clinical notes.

Audit of appropriateness of referral from dental practitioners to OMFS.. Mr. Von Arx

Audit of emergency re-admission (CHKS indicators) C H Chan

Audit of complications within H & N Cancer Surgery May 2004 – April 2005.. C H Chan

Audit of INR Analysis for patients on warfarin and require dental extractions. A Morgan

Audit of delays for emergency patients having operation in OMFS. N Wright

On-going trauma data collection. C H Chan

Temporal Artery Biopsy: Dr Marilou Ciantar

Dental assessment, dental extractions before and after radiotherapy on H & N cancer patients.
Rob Bunyan

Audit of suturing of facial lacerations for patients presenting to the A & E Dept.
Mr. Von Arx

Audit of patients transferred to the L & D from peripheral A & E Dept. Delay, total numbers, problem patients, suitability of transfer.
Mr. M T Simpson

Audit comparing the use of a portable coagulation monitor and laboratory testing to measure the INR Level of patients who take warfarin and require dental extractions
A Morgan

Resorbable plates Fixation with restorable plates and screws in orthognathic surgery: The Beds and Herts. Experience.
S Popat

Merseyside — Patrick Magennis

Multi-disciplinary "All Unit" Audit Days
1) Trauma – A Regional Problems
2) Orthognathic Surgery

During 2005-2006 we held two multi-disciplinary audit days inviting contributions from all the units across the region.

Nursing staff from outpatient clinics, wards and theatres, clinical staff from orthodontics, maxillofacial surgery and the dental school, and maxillofacial lab technicians.

Both meetings were felt to be very constructive by all those participating. Changes were made in the information provided to patients, and the patient pathway in both groups. Further all unit audit days are planned for 2006-2007.

Regional Head and Neck Cancer Audit Day

In December 2005 we held our second regional audit day based around the core of the Aintree Head and Neck Oncology Group (ANHOG).

Of interest was an audit of patients recorded on DAHNO and on the Liverpool Cancer Database which revealed a number of patients were being treated out with the MDT.

T2 Tongues – do they require bilateral neck dissections?
Mr S Parikh Simon Rogers

1. Assess whether patients whose T2 primary squamous cell carcinoma of the tongue did not cross the mid-line and who had unilateral neck dissections failed in the contra-lateral neck.

2. Assess whether patients whose T2 primary squamous cell carcinoma of the tongue did not cross the mid-line and who had bilateral neck dissections had any positive nodes in the contralateral side.

Summary of Findings Tumour encroaching but not crossing the midline did not tend to recur in the neck on the contralateral side.

Recommendations Made There is no need to undertake bilateral neck dissection where the tumour approaches but does not cross the midline.

Changes in Practice Implemented - Bilateral neck dissections no longer performed unless the tumour crosses the midline

Antibiotic Prescribing in the Maxillofacial Unit
Miss Rose Matusiak Dr Richard Cook

1. Compare current antibiotic prescribing practice with the evidence available

2. Create a guideline for the prescribing of antibiotics in maxillofacial surgery.

Summary of Findings: A wide range of antibiotics and antibiotic dosages were being prescribed.

Recommendations Made : An evidence based guideline has been developed and has just been approved by the Clinical Governance group of the Trust.

Data recorded on the DAHNO Database (Data for Audit in Head and Neck Oncology) compared to that recorded on the Liverpool Head and Neck Cancer Database (LHNCD)
Patrick Magennis Alan Devon, Simon Rogers

1. Compare data recorded on the LHNCD with that submitted for the cancer network on the DAHNO database

2. To try to discover the reasons for any discrepancies.

Summary of Findings: 70 patients recorded on DAHNO i.e. diagnosed and treated within the Mersey Clinical Network had no record on the LHNCD. As all patients discussed at the Multidisciplinary Team

meeting (MDT) are entered on the LHNCD, this group of 70 patients had not benefited from this gold standard treatment.

Recommendations Made : At the (Aintree Head and Neck Oncology Group) AHNOG meeting it was discussed that all patients should be discussed at a MDT.

Dissemination of Results: AHNOG Audit meeting – December 2005

Labial Frenectomy review at Alder Hey Hospital
Miss Lucy McLean. Mr John Cooper

1. To assess that labial frenectomies were undertaken at the correct stage in patient's dental development according to British Orthodontic Society (BOS) guidelines

2. This states that children with unerupted permanent canines should not have a labial frenectomy

Summary of Findings: 36.8% of all labial frenectomies were compliant with BOS guidelines for treatment of median diastema

No good scientific evidence for carrying out procedure for other reasons

Recommendations Made : There is a need for published guidelines on when labial frenectomies are performed.

Experience with Medpore alloplast for reconstructing orbital floor defects in patients with maxillofacial trauma.
Mr M Dodd. DC Jones, G Douglas , G Kaur

1 To look at complications with the use of this alloplast within the department

2 Compare this to complications reported in published literature

Summary of Findings - The use of Medpore in Liverpool compares favourably in terms of outcome and complications with other series published in the world literature.

Recommendations Made : There is no reason at present to change our practice

Skin Lesions – waiting times and management
Miss Lucy McLean. Mr Mark Boyle

1. Delay to original appointment and treatment

2. Grade of Clinician seeing patient

Summary of Findings: Standard: 75% patients are seen within 8 weeks of referral.
Achieved: 60% of patients seen within 8 weeks of referral
Only 15% wait more than 12 weeks
Failure to attend was most common reason for delay.

Target: 75% of patients see a consultant or registrar during their visit.
Achieved: Exactly 75% of patients were seen by a consultant or registrar

Recommendations Made : Less tolerance of routine patient DNAs?
Address staff shortages/ overstretched clinics.

Side Marking Audit June 2006
Mr Tom Rohan. Eileen Doherty

1. Assess the accuracy of side marking pre-operatively for maxillofacial patients.

2. Compare these results with previous audit of side marking (for fractured cheekbones).

Summary of Findings: Side marking had improved in all measures with reduced number of patients not being marked, and no patients incorrectly marked. For example marking for broken cheekbones had improved from 59% to 92%

Recommendations Made : Review of the case-notes showed some patients were recorded as not being marked when the procedure was either on mid-line structure, or was a dental extraction (where the marking, if any, would be on the radiograph rather than the patient). This meant the overall marking had only improved by 1%.

Although there was discussion that some procedures could be omitted from the requirement to mark sites, after discussion at the regional audit meeting it was agreed that the default position should always be to mark the sides.

Changes in Practice Implemented: Importance of side marking is now part of induction of all SHOs and SpRs.

Pre-operative Fasting for Maxillofacial Surgery Patients
Mr Paul Banks Dr Groome Mr Patrick Magennis

1. Audit the length of pre-operative fasting of patients treated on Ward 29.

2. Compare the length of fasting of elective patients and those waiting for emergency surgery.

Summary of Findings: Elective patients fasted on average 10 hours from fluids and 14 hours from food. Emergency patients fasted for 15 hours from fluid and food (one for 22 hours), often for many days in a row as they waiting for a space on the emergency list.

Only 2 patients were given pre-op IV Fluids

Recommendations Made: For elective patients due for surgery in the afternoon, they should be asked when they started their fast.

For emergency patients, there should be a low threshold for IV fluids to be given. At 5pm staff should check with theatre and if the patients are not due to go discuss with the clinicians whether they should be fed.

Changes in Practice Implemented: Emergency patients prescribed IV fluids unless they had a definite theatre time.

'Urgent suspected cancer referrals' Feb 2006
Mr Simon Rogers B Balaggan (Dental Student)

1. Audit the pattern of "urgent" cancer referrals (including the Urgent Cancer Referral [UCR] Fax / 2 week wait) to hub and spoke hospitals within the regional maxillofacial unit

2. Audit the final diagnosis of patients referred urgently as potential cancers

Summary of Findings: All patients referred with the UCR process were seen within 2 weeks. The proportion of patients referred urgently with possible cancer varied across the region. In some units the percentage whose diagnosis was confirmed as cancer was as low as 10%.

The average was 22% much better than other published audits (5%, 11% and 15%).

Dentists do not have access to the Urgent Cancer Referral Fax process. Their urgent referrals were often by phone and letter and this process compared favourably to UCR faxes.

Recommendations Made : Referring practitioners should be given feedback on their referrals, particularly where these were non-cancer.

Dentists should have access to the UCR process

'Urgent suspected cancer referrals' and Deprivation Index
Mr Simon Rogers Kate Preston (Dental Student)

1. Audit the pattern of "urgent" cancer referrals (including the Urgent Cancer Referral [UCR] Fax / 2 week wait) to hub and spoke hospitals within the regional maxillofacial unit

2. Compare the patterns of referral to the deprivation index of the area from which the referral was received.

Summary of Findings: Patients from areas of deprivation were more likely to have cancer than patients referred from better off areas.

Recommendations Made : Education, particularly targeted at the 'worried well' may reduce the number of inappropriate UCR referrals from these areas.

Changes in Practice Implemented: All units participated in Mouth Cancer Awareness Week.

Management of Injuries to Teeth at Alder Hey Hospital
Emma Henley

1. Audit of frequency and nature of injuries to teeth seen at Alder Hey Hospital

2. Review of the treatment given and comparison with evidence based practice.

Summary of Findings: Most patients were treated appropriately using adhesive wire splints.

SHO's were not aware that there was an on-call maxillofacial laboratory service.

Recommendations Made : Adhesive and wires for splints should be available in all Accident and Emergency Units (for the use of Maxillofacial SHOs)

Availability of the on-call laboratory service included in induction programme.

Lab-made splints best for space maintenance following loss of a tooth.

These appliances did not need to be made out-of hours.

Changes in Practice Implemented: Accident and Emergency Departments contacted and asked to have adhesives and wires for splints.

Data recorded on the Liverpool Head and Neck Cancer Database
Alan Devon Patrick Magennis

1. Monitor the data recorded on the LHNCD

2. Compare data to agreed standards (100% of key data recorded)

Summary of Findings: For almost all of the key data (NHS Number, Diagnosis, Stagings) we reach the target set. Some data e.g. date of diagnosis is difficult where the original diagnosis is made in a spoke unit.

Recommendations Made : We will continue to monitor data recorded monthly and aim to collect all of the key data.

Changes in Practice Implemented: Copies of all pathology reports now pass through Alan Devon

Critical incident reporting and analysis and "near misses"
Patrick Magennis Multidisciplinary team

1. Incident reporting policies and procedures including themes/trends analysis and identifying areas for further audit

2. Discuss 'near-misses' which did not have incident forms completed.

Summary of Findings: All critical incidents are discussed at the multi-disciplinary process of care meeting during the monthly regional audit days. There is an open process to allow all members of the team to raise any factors which could influence patient care or treatment outcome.

Complaints reporting and audit and 'near misses'
Patrick Magennis Multidisciplinary team

1. Complaints policy and procedures including themes/trends analysis and identifying areas for further audit

2. Discuss 'near-misses' which did not have complaints made.

Summary of Findings: All complaints are discussed at the multi-disciplinary process of care meeting during the monthly regional audit days. There is an open process to allow all members of the team to raise any factors which could influence patient care or treatment outcome.

Consent audit
Patrick Magennis Multidisciplinary team

1. Monitor process of consent process

2. Keep records of the Consent Competency Framework

Summary of Findings: There is a rolling audit of the consent process including who takes consent and how that consent is recorded.

Case Note Audit
Patrick Magennis Multidisciplinary team

1. Monitor accuracy of case notes within the Trust Case Note Audit process

2. In addition keep a rolling audit of case notes using the CRABEL system

Summary of Findings: The Trust Case Note Audit highlighted a number of areas where case notes did not reach the required standards.

Recommendations Made : The rolling audit programme is now to be monthly with changes in the SHO timetable meaning that each SHO will spend a session undertaking casenote audit in each of their 8 week blocks of activity.

The importance of accurate casenotes is stressed in the induction packs for all new SHOs

Changes in Practice Implemented: Rolling audit now weekly performed by SHOs

Liverpool Experience of Ameloblastomas
Mr S Parikh Gillian Hall

1 To review the presentation, treatment and outcome of ameloblastomas treated in the Mersey Region with particular reference to Ki 67 and recurrence

2 Compare treatment patterns with those of published series.

Summary of Findings Merseyside treats ameloblastomas in a more conservative manner than published series. Ki67 expression was not related to recurrence of the ameloblastoma.

Recommendations Made At this stage the more conservative approach to the treatment of ameloblastomas does not appear to increase the recurrence rate.

MRSA in the Regional Maxillofacial Unit
Simon Rogers

1 Monitor incidence of MRSA

2 Compare with national incidence

Summary of Findings 97 patients had MRSA, 84 single episode, 13 multiple

1.5 % (compared to 4.5 for rest of Trust)

Recommendations Made Patients receiving major surgery for primary head and neck cancer had 14% rate of MRSA.

Risk factors for MRSA are high stage disease and free flap.

Audit of cephalometric orthognathic outcomes in the Northern Region
Mr M.Thompson, SpR OMFS, JCUH, Regional Joint Orthodontic/Oral & Maxillofacial Audit

The aim of this audit was to assess the outcome of orthodontic/orthognathic treatment in the Northern region compared to the National Audit using the severity/outcome form. This was a retrospective audit including all patients undergoing orthognathic surgery in the Northern region in 2003. Demographic data was recorded. Cephalometric analysis was performed on lateral cephalograms taken at the start of pre-surgical orthodontics and after surgery. 7 key cephalometric parameters were recorded: SNB, ANB, LFH%, Overjet, Overbite, UI/Mx angle, Holdaway angle. Values falling within 2 standard deviations of normal were recorded as acceptable. A score was generated by adding up the number of parameters which were acceptable. Patients could then be graded for severity of initial condition (low score = more severe) and quality of outcome (high score = better outcome).

63 cases were identified for which there were suitable and available lateral cephalograms.

34 bimaxillary osteotomies

34 single jaw procedures

The regional mean severity score pre-treatment was 3.8, which was exactly the same as the national mean.

The regional mean outcome score was 6.27 compared with a national mean of 5.4.

Although limited as a measure of outcome this method provides a quick, simple and reproducible technique for recording results. Digital X-ray systems and computer archiving of lateral cephalograms will help to overcome the problem of missing records.

Audit of radiologically inserted gastrostomies
Miss A.Geddes Sunderland Royal Hospital

The aim of this study was to identify whether there were any clinical problems associated with the placement of radiologically inserted gastrostomies (RIGs). This was a retrospective audit. Patients from the departments of OMFS & ENT who had undergone RIG insertion between January 2001 and December 2004 were included in the study. 87 RIGs were placed in 81 patients. There was a preponderance of male patients and the mean age was 63 years. RIGs were most commonly placed in patients who had been diagnosed with a T4 tumour of the H&N. 37% were placed prior to surgery/radiotherapy, 36% during treatment and 21% afterwards. 6% were placed during palliative treatment. 87% of placements were free of any complication, 8% experienced minor complications (for example local skin soreness) and 5% had major complications (for example peritonitis). It was concluded that the complication rate associated with RIGs compared favourably with that of endoscopically inserted gastrostomies.

Cumberland Infirmary, Carlisle
11 April 2005

1.) An Audit of 2mm punch biopsies
Miss K. Hampton

2.) Total intravenous analgesia in patients undergoing orthognathic surgery
Miss R. Ranganathan

3.) Facial nerve function following parotidectomy
Miss S.Tatenini

4.) Protocol for monitoring IV sedation
Miss P.Kumar

Sunderland Royal Hospital – 6 July 2005

1.)Attitudes to the European Working Time Directive
Mr R.Gibson & Miss A.Geddes

2.)Audit of radiologically inserted gastrostomies
Miss A.Geddes

3.)Review of H & N BCC excision
Mr S. Earnshaw

4.)Role of CT Thorax in staging oral SCC
Mr S.Cove

5.)Patient monitoring during intravenous sedation
Mr R.Hobman

James Cook University Hospital, Middlesbrough – 6 July 2005
Regional Joint Orthodontic/Oral & Maxillofacial Audit

1)Audit of management of supernumeraries associated with impacted maxillary incisors in the Northern Region
Dr D.Slater

2)Audit of cephalometric orthognathic outcomes in the Northern Region
Mr M.Thompson

1)Psychological assessment of orthognathic patients: What should we be doing? What do we know?
Dr Sue Cunningham, Eastman Dental Hospital, London

James Cook University Hospital, Middlesbrough – 7 November 2005

1.)Compliance with national and local guidelines on consent
Miss M.Bhagwath

2.)MUA # nasal bones – a comparison between OMFS & ENT
Miss J.Norris, Dr S.Edrees & Dr R.Sharma

3.)An Audit of clinical review appointments
Miss N.McArdle

4.)A comparison of the experience & management of cervicofacial infections between the department of OMFS & ENT
Dr S Edrees & Dr R Sharma

Newcastle General Hospital – 17 January 2006

1.)Compliance with EWTD. Mrs L.Mercer

2.)Patient experiences after surgery to treat # mandibles. Mr P.Mullan

3.)Are we apicecting appropriately?
Miss S.Brennan

4.)SHO views of their educational supervision
Mr C.Veeroo

5.)Initial experiences with the PACS system
Miss L.Mangnall

6.)Compliance with the 62 and 31 day rule
Mrs J.Korsen

North West — Steve Langton

There are four groups of hospitals providing oral and maxillofacial services in the North West. These include South Manchester, based at Wythenshawe, covering South Manchester, Stockport and parts of North Cheshire, North Manchester including Oldham and Rochdale, Central Manchester, including Salford. The Lancashire units are 'The Four B's' (Blackburn, Burnley, Bolton and Bury) and Preston, also covering Blackpool and Chorley.

North Manchester

A variety of successful audits have been undertaken in this unit, the main projects being as follows:

1.Compliance with orbital observation protocols in orbital trauma.

2.Type of haematological investigations being carried out for patients presenting with white patches.

3.Audit of facial radiographs requested in trauma patients by A and E and radiology departments. Result: over prescription of facial films. Plan to educate A & E staff and radiologists on required films based on clinical examination.

4.Reasons for cancellation or postponement of out of hours trauma/emergency cases.

Ongoing

5.Antibiotic prophylaxis in dentoalveolar surgery.

6.Case note audit in record keeping for trauma patients.

7.Audit of oncology patients with regard to quality of life issues and availability of pre and postoperative support.

8.Retrospective analysis of free flaps following ablative surgery, with regard to patient and flap survival.

9.Implant audit. To determine departmental success rate of implants and possible reasons for failure.

South Manchester

The clinical governance programme runs ½ a day every 2 months. It includes all units in the hub and other related specialties such as orthodontics.

As part of the overall clinical governance one session per year is dedicated to the following:

Morbidity/Mortality 2005

Complaints review 2005

Clinical Incidents 2005

Main maxillofacial audits for the year included:

Patient satisfaction with GA services at Stepping Hill hospital

Overall satisfaction was high. Problems relating to theatre layout were identified.
Outcome

Theatre is being moved

Simple nasal fracture day case rates

A higher than national average of patients with simple nasal fractures were not treated as day cases.

Outcome

departmental protocol revised. For re-audit in 1 year.

Audit of antibiotic prophylaxis

All patients who needed antibiotic prophylaxis received antibiotics but different protocols were being used.

Outcome

Use only BNF guidelines

Surgical aspects of orthognathic treatment

Audit of ectopic canines

The Four Bs (Blackburn, Burnley, Bolton, Bury)

Informed Consent

Aims

Was legible informed consent obtained?

Did the appropriate grade of staff obtain consent?

Outcome

Legible appropriate consent obtained in 100% of cases sampled appropriate staff took consent in 100% 0f cases

Conclusion

Consent taking is of an appropriate standard in the maxillofacial unit of East Lancashire Hospitals.

Other audits

Success rates following IMF treatment

Retrospective osteotomy outcome study

Orbital floor injuries

Appropriate consent for operation

Head and neck returns to theatre

Implant success rates

DVT prophylaxis audit

Wrong site surgery

Antibiotic prophylaxis for facial lacerations

Compliance with guidelines for conscious sedation

Antibiotic prophylaxis for salivary gland surgery

Preoperative assessment and postoperative monitoring of zygomatic fractures
Neil Scott, Anders Hjort

Retrospective audit of 50 patients undergoing open reduction of zygomatic fractures between July 2004 and September 2005

Audit standards

British Journal of Oral and Maxillofacial Surgery, R Ord (1981), J Hayter (1991)

Aims

To ensure appropriate preoperative investigation of patients particularly with reference to potential orbital sequelae (e.g. retrobulbar haemorrhage).

To ensure appropriate use of postoperative eye observations as per departmental protocol. 100% compliance required in view of potential seriousness of retrobulbar haemorrhage.

Findings

- 36 patients undergoing open reduction and internal fixation of fractures of zygomatic complex, with four additional patients undergoing isolated orbital floor exploration.
- Appropriate preoperative ophthalmic assessment only carried out in 70% of patients (e.g. Snellen chart in 35 / 50).
- Postoperative eye investigations carried out in 96% of patients but only 80% following departmental protocol for recommended frequency and total time

Outcomes

- Re-emphasis of departmental protocol for preoperative assessment (e.g. Snellen chart mandatory) and postoperative eye observations (half-hourly for four hours, hourly for four hours).
- Postoperative eye observation proformas to be available in theatres to allow appropriate entry in postoperative aspect of operation notes.
- SHO handbook to be rewritten emphasising need for above.

Plan re audit 18 months

Two-week rule referrals
Titiaan Dormaar, Cyrus Kerawala

Retrospective audit January 2005 – December 2004

Audit standards

National two-week rule targets

Aims

To ensure compliance with national standards

Comparison with previous audit (April 2003 – March 2004)

Findings

- **Frimley Park Hospital**
  - 17 referrals
  - 3 DNAs
  - Mean time from referral to consultation 10.6 days (5– 20)
  - 92.9% of patients seen within two weeks
  - 2 patients (14.3%) subsequently having malignant disease
- **North Hampshire Hospital**
  - 19 referrals
  - 1 DNA
  - Mean time from referral to consultation 8.6 days (2 – 15)
  - 94.4% of patients seen within two weeks
  - 2 patients (11.1%) subsequently having malignancy disease
- **Royal Surrey County Hospital**
  - 76 referrals
  - No DNAs
  - Mean time from referral to consultation 8.9 days (2 - 27)
  - 96.1% of patients seen within two weeks
  - 16 patients (21.1%) subsequently having malignant disease

Previous audit two-week rule compliance FPH 100%, NHH 94.1%, RSCH 100%. Numbers subsequently having malignant disease 8.7% FPH, 0% NHH, 13.5% RSCH. Total number of referrals 73 FPH, 18 NHH, 59 RSCH

Outcomes

93 – 96% of patients comply with two-week rule target. As previous audits have demonstrated a relatively low number of patients subsequently demonstrated to have malignant disease.
Plan re audit 1 year

Other Audits

Uniformity of patients details in the theatre lists, consent forms and operating book
Jonathan Lee

Management of avulsed permanent teeth
Jaya Indria, Carrie Newlands

Use of preoperative antibiotics in minor surgery
Nishantha Perinparajah, Neil MacMillan

Cross infection control on maxillofacial ward rounds. David Furze, Carrie Newlands

Routine exodontias in warfarinised patients
Iona Pop, Neil Hamilton

Split thickness skin graft donor site management
Mark Tulllet, Bhavin Visavadia

Unexpected returns to theatre
Lucy Hartree, Mike Monterio

Scotland — Ian Holland

Report by Barry O'Regan

Audit activity across Scottish OMFS units is presented at SOMS, the annual meeting of the Scottish Oral & Maxillofacial Society. This year's meeting in Edinburgh had an Orthognathic theme, and was a collaboration between SOMS and our Orthodontic colleagues. Guest speakers were Mr Peter Ward Booth and Mr Alex Cash, Consultant Orthodontist.

National Audit Project

Le Fort 1 osteotomy: outcomes and complications
D. Offord, G. Bharadwaj, B. O'Regan

Type of audit

Prospective audit of the le Fort 1 osteotomy

across Scotland

Audit aims

To establish a database of LF1 osteotomies

To study incidence of complications

To examine two outcome indices: immediate (return to theatre) and delayed (patient satisfaction)

Method

Postal questionnaire to all OMFS units in Scotland

Time period

6 months: April – October 2005

Results

51 LF1 osteotomies across Scotland in 6 months. 9 surgeons

Average number per surgeon = 5.6 (range 3-9)

Leverage the most common method of pterygomaxillary separation (30/51)

Few complications, mostly ION injury

Incidence of serious vascular complication = 0

2/51 cases returned to theatre: failed fixation, residual AOB

VAS suggest patient satisfaction with facial appearance to be excellent

Discussion

Should there be a minimum numbers threshold per surgeon?

Is it not time to establish a live registry of Scottish orthognathic patients?

A Scottish registry for patients with dentofacial deformity.
J. Clark, Consultant Orthodontist

This paper described a pilot project which might provide the basis for a Scottish registry of patients with dentofacial deformity that would include a severity and outcome assessment.

Postoperative radiographs are not necessary following fixation of fractures of the mandible and zygomatic complex.
J Chandramohan

Seasonal variation in maxillofacial trauma.
C Fenlon

450 consecutive percutaneous gastrostomies by a single maxillofacial consultant.
E.B. Larkin

The validity of a computer prediction system (CASSOS) for planning surgical correction of facial deformities.
Ross Jones

Experience with genial dropdown osteotomy
D Campbell

Perception of facial asymmetry.
A Cord

Provision of mandibular advancement splints in Forth Valley OMFS department
G Pozzi

Reshaping heads with helmets – a management option for deformational plagiocephaly
A Lupu

Temporal artery biopsy.
C Mather

Sepsis syndrome in Maxillofacial Surgery
T Handley

The effectiveness of a volar splint in skin grafting following radial forearm flap.
S Hislop

CT chest to look at the pick up rate for synchronous tumours
S Hislop A Carton

South West Region — Peter Revington

Are we meeting National clinical Standards for Head and Neck cancer waiting times?
Karen Andrews, Chris Bell, Jonathan Penny

Aims

- To assess whether UBHT is complying with the national clinical standards for cancer waiting times.
- To identify barriers to efficient cancer care.
- To ensure fast, efficient, streamlined care.
- To improve services for prevention, screening, diagnosis and treatment.
- To ensure that people with cancer get the right professional support and highest quality treatment.

Audit Standards

Cancer Plan 2000 states that by December 2005 there should be a maximum one-month wait from diagnosis to treatment and a maximum two-month wait from urgent GP referral to treatment for all cancers.

Standard One:

Date of urgent referral (fast track) to date of first clinic appointment should be within 14 days (100%).

Standard Two:

Date of urgent referral (fast track) to date of first definitive treatment should be within 62 days (100%).

Standard Three:

Date of diagnosis (decision to treat) to date of first definitive treatment should be within 31 days (100%). **Patients Included in Audit:**

Targets apply to all patients referred to UBHT in 2004 regarding head and neck cancer.

Targets apply to all patients cared for under the NHS.

Targets apply to patients newly diagnosed with cancer. This includes metastases, which present before the primary tumour.

Targets apply to patients diagnosed with a second new cancer, which is not a recurrence.

Patients Excluded from Audit:

Patients receiving treatment for a recurrence.

Patients who decline treatment.

Patients who die before treatment commences.

Patients with medical record unavailable.

Patients with insufficient information in medical record.

Patients who chose to complete their treatment privately.

Breaches:

Patients who are seen after 14 days of urgent GP referral (both those received in 24 hours and those received outside 24 hours).

Patients who are treated after 31 days of decision to treat.

Patients who are treated after 62 days of urgent GP referral.

Method

A retrospective case note review was undertaken using an audit proforma (Appendix 1), which was devised by Karen Andrews (SHO), Jonathan Bernstein (SHO), Chris Bell (Associate Specialist OMFS), and Jonathan Penny (Audit Facilitator) at UBHT.

The case notes for new patients with Head and Neck Cancer presenting to Bristol Dental Hospital during a 1-year period (Jan 04 – Dec 04) were reviewed. The proforma was piloted on 5 case notes to ensure that the information needed was readily available and that the proforma itself was an appropriate data collection tool.

Results

42 new patients head and neck cancer patients were identified within the period from January 2004 to December 2004.

24 of the patients met the inclusion criteria

Table 1: Results of Audit on Head and Neck Cancer Waiting Times

DoH Target	Pass	Fail	Total	Success Rate	Failure Rate
14 Day Wait	**10**	**0**	**10**	**100%**	**0%**
62 Day Wait	**4**	**5**	**10**	**44%**	**56%**
31 Day Wait	**16**	**8**	**24**	**66.7%**	**33.3%**

Standard 1: Date of urgent referral (fast track) to date of first clinic appointment should be within 14 days.

- 10 patients in total were referred via the fast track system.
- All 10 patients achieved the above standard and were seen within 14 days.

Standard 2: Date of urgent referral (fast track) to date of first definitive treatment should be within 62 days.

- 10 patients in total were referred via the fast track system.
- Although all 10 patients achieved the two-week wait standard, only 4 patients (44%) achieved the 62-day wait standard.
- 5 patients (56%) failed to meet the above standard.
- 1 patient underwent 1 year of monitoring before it was decided to treat the lesion, therefore, is excluded form this part of the audit.

Standard 3: Date of decision to treat to date of first definitive treatment should be within 31 days.

- 16 patients (66.7%) achieved the above standard and were treated within 31 days from the decision to treat.
- 8 patients (33.3%) failed to meet the above standard.

- **Table 4: Reasons for Delay**

	Number of Patients	% of Patients
No reason recorded	4	33.4%
Imaging	1	8.3%
Admission/Theatre	1	8.3%
Biopsy	1	8.3%
Complex Pathway	2	16.7%
Patient Choice	3	25%

Length of wait	Average	Max	Min
14 day standard	8	12	0
62 day standard	56	76	33
31 day standard	29	98	3
Imaging	14	35	7
Biopsy	10	36	2

Days over standard	Average	Max	Min
62 day standard	12	27	1
31 day standard	17.1	67	4

Conclusions

- All GDP/GMP referrals within this sample were via the fast track system.
- The success rate of the 14 day wait audit was 100%
- The success rate of the 62 day wait audit was 44%
- The success rate of the 32 day wait audit was 62.7%
- 12 patients in total did not meet the waiting times targets. 1 of these patients breached both the 62-day wait and the 31-day wait.
- The reason for the breaching was not recorded in the medical records of 4 patients. It is assumed that the most likely reason for breaching is due to lack of theatre time and space with regards to the 31 day wait audit and due to imaging with regards to the 62 day wait audit.
- 41.7% of the breaches were due to either complex pathways or patient choice.
- 58.3% of the breaches were due to delays in the head and neck cancer care pathway i.e. biopsy, imaging and theatre/admission.

The success rate of the 62-day audit (44%) compared to the 31-day audit (62.7%) proves that the major causes of delays to the head and neck cancer care pathway are investigative processes. The most significant delay was due to radiology i.e. MRI and CT scans.

Audit of adherence to selection criteria for apicectomy"
Monica Yadava

Aim

To check departmental compliance with National guidelines, establish best use of departmental resources and reduce inappropriate referrals.

Standard

Royal College of Surgeons of England, "Guidelines for Surgical Endodontics", 1996.

Method

This was a prospective audit over 5 months, of patients referred to the OMFS department for apicectomy. The notes of 50 consecutive cases were reviewed to determine adherence to the guidelines. The data collection tool looked at the presence of periradicular disease, the presence of orthograde root filling and the feasibility of re-root treatment. The audit looked at reasons for accepting patients with no orthograde filling, and reasons for not requesting re-RCT.

Results

No patients were offered apicectomy without orthograde RCT. Only 4% did not have re-RCT requested where there was an indication for this. Only 56% of referrals went on to have apical surgery.

96% compliance with guidelines.

Conclusion

Good compliance to RCS guidelines across the OMFS department, with more then 50% of referrals being turned down for apical surgery as not appropriate.

South Thames — Carrie Newlands

Report from Keith Altman

Management of White Patches

This was a regional audit. A proforma was filled in to look at management of these lesions in terms of follow-up and biopsy. The results were quite "mixed" with respect to the biopsy rate and how long patients were followed up for and so firm conclusions were difficult to arrive at. This audit is currently being redone and extended in terms of the parameters being recorded.

Transfusion in Orthognathic Surgery

This was a re audit of a previous audit undertaken 19/11/02. It established that the rate of cross

matching for orthognathic procedures is very low, with most patients being "grouped and saved". The transfusion rate was very low at less than 2% overall for these procedures.

Incidence of neurosensory disturbance following orthognathic surgery
F. Modarai, D. Grimes: Sidcup

Background and objectives

The most common complication following orthognathic surgery is neurosensory dysfunction.

We aimed to determine the incidence of neurosensory deficits in patients who underwent bilateral sagittal split osteotomy (BSSO) and Bimaxillary osteotomy at Queen Mary's Hospital. The areas affected, the type of neurosensory deficit and the impact on patients' lives were also assessed.

Method

Sixty patients who had undergone orthognathic surgery between May 2001 and January 2005 were recalled to the department. From this number, 24 (40%) patients attended. The procedures that had been carried out included bilateral sagittal split osteotomy (8), bimaxillary osteotomy (15) and bimaxillary osteotomy + genioplasty (1). Incidence of paraesthesia was assessed by interview to discover sites affected and nature of sensory disturbance experienced. In addition 2 point discrimination test was carried out at a point on the lower lip measured 20mm laterally from the midline. Touch sensation testing was also carried out using cotton wool on both sides of the lip and chin. Mean follow up period was 22 months post operatively.

Mean age was 24 years.

Results

Thirteen patients (54.2%) reported some altered sensation affecting their face.

This was mainly involving the lip and chin. 37.5 % of these patients reported normal but reduced sensation although abnormal sensation (12.5%) and neuropraxia (4.2%) were also experienced.

33.3% of patients had reduced touch sensation of the lip or chin on testing of the left side as opposed to 29.2% on the right side.

Patients with objective neurosensory deficit (ONSD) had increased 2 point discrimination compared with patients without ONSD (7.1 +/- 0.8 mm vs 13.5 +/- 1.5 mm, P=0.0006).

No patients considered the altered sensation disabling.

Conclusion

A significant incidence of neurosensory deficit was found in patients who had undergone orthognathic surgery, however the impact of this on patients' lives was negligible.

Trent Region — Steve Layton

Do Anything Rather Than Nothing: Quality of life in terminally ill patients enrolled in a clinical trial of cancer immunotherapy
Alasdair McKechnie, Lincoln

Aims & Objectives: To monitor quality of life issues as a "spin off" research, during a clinical trial of immunological treatment for terminal cancer

Gold Standard: Not applicable

Materials & Method: Prospective study, 9 patients with stage IV cancer enrolled, and given 4 cycles of vaccination with two types of dendritic cell pulsed with peptide.

Results: Data collected at 4-time points, although patient survival deteriorated during course of trial all patients FACT-BRM scored improved. In all patients quality of life was maintained during the trail and in patients who survived quality of life improved during trial period.

Conclusion: In terms of quality of life it seems it may be better to do something rather than nothing, therefore patients should be given the opportunity to participate in clinical trial. Even if survival may not be improved by the trial quality of life may be.

A prospective pilot study to investigate the usefulness of clinical photographs in the communication pathway between primary care practitioners and a Department of Oral & Maxillofacial Surgery
Noel Perkins, P T Doyle P J Sandler Chesterfield

Aims & Objectives: To investigate the usefulness of clinical photographs as an aid to communication with primary care practitioners (PCPs) referring patients to the OMFS Department.

Gold Standard: Not applicable

Materials & Method: Prospective pilot study. Digital photographs of both clinical lesions and plain radiographs were taken by trained SHO operators with the departmental digital camera. A questionnaire was enclosed with the referral response letter and printed proforma (containing the clinical photograph).

Results: Questionnaire response rate was 87.5% (105/120). 70% of practitioners found the photographs to be of educational value; 55% of practitioners thought that providing clinical photographs with the written response to their referral would influence future patient management; 72% of PCPs said that if they had the equipment they would consider routinely sending clinical photographs with their referral letters to the OMFS Department.

Conclusion: This pilot study provides some evidence that a significant proportion of PCPs found the inclusion of clinical photographs with the referral response letter to be useful. Further research is necessary.

An audit of note keeping by maxillofacial staff for in patients
S. Bhakta, P. Ameerally Chesterfield

Aims & Objectives: Ensure that documentation is of an adequate standard

Gold Standard: Level 1 CNST Documentation Standards which require the following: Date and time written**,** identifiable signature**,** legible, written in black ink**,** legibility of prescription.

Materials & Method: Retrospective review of 51 patient case notes staying overnight in the ward in 2005. Assessed 118 entries in total for these patients. Recorded data on proforma and analysed via use of Excel. The case notes randomly acquired from theatre lists.

R**esults:** All entries were correctly dated, the time was noted, an appropriate name and bleep number was present and all entries were legible and recorded in black ink. Very few notes had drug cards attached. All drug cards checked in audit notes were legible.

Conclusion: The standard of documentation was high and there will be a re-audit in 6 months time after issuing written guidelines regarding documentation to the maxillofacial team.

Retrospective and Prospective Audits of the standard of record-keeping for intravenous sedation on a minor oral surgery clinic
Noel Perkins, David Craig : Chesterfield

Aims & Objectives: To evaluate any improvement in record-keeping following implementation of a standardised sedation record form.

Gold Standard: "Conscious Sedation In The Provision of Dental Care" (Department of Health, 2003).

Materials & Method: Retrospective and prospective audits.

Results: 51 consecutive cases (retrospective audit); 37 consecutive cases (prospective audit). Excellent operator compliance with completion of the sedation record forms. Significant improvement in the standard of record keeping when the Sedation Record Form was implemented.

Conclusion: Sedation Record Forms can be an important part of record keeping for conscious sedation. In addition to improving the efficiency of the process, they facilitate clinical audit, and this should ultimately translate into improvements in patient care.

An audit of outcome of TMJ patients treated by arthrocentesis
Andrew Sadler Lincoln

Aims & Objectives: To work out proportion of patients helped, to define the nature of any improvement, to try and predict which patients may be helped the most, and which ones might not be helped by arthrocentesis.

Gold Standard: not stated

Materials & Method: Retrospective audit completed by retrieving information from a personal database followed by examination of case notes.

Results: 77 patients received Arthrocentesis over 4 years. 48 case notes examined retrospectively so far, of which 44 patients were female & 4 male, 3 patients DNA follow up. From examining the case notes it was noted that 28 patients were helped (62 %), 17 were not helped and 1 patient had complete resolution of symptoms.

Conclusion: Overall 62 % of patients had improvement at short follow up following arthrocentesis. Only 1 had complete resolution. Improvement of symptoms after arthrocentesis was not related to age, length of symptoms, and nature of symptoms.

Are bite guards an effective treatment for TMJ dysfunction?
Lucie Brittain: Rotherham

Aims & Objectives: To find out if patients wear the bite guards they are given and to discover if patients' symptoms improve

Gold Standard: Not stated

Materials & Method: Questionnaire based retrospective audit carried out over 19 months, 182 patients were identified by use of laboratory database.

Results: 86 replies from possible 182 (47%), 81 patients wore their bite guard and the majority of these patients (64) only wore their bite guard at night. Of the patients who wore their bite guard, 61 reported that their symptoms had improved. Of the 5 patients who did not use bite guard only 2 had an improvement in symptoms. 60 patients reported that they felt the bite-guard improved their symptoms.

Conclusion: It seems that patients comply with treatment and find bite guards helpful for their TMJ symptoms.

An audit of maxillofacial emergency database at Chesterfield Royal Hospital following the implementation of a new maxillofacial emergency data capture form and a new shift system
Fatima Alsayer :: Chesterfield

Aims & Objectives: To improve the standard of data capture for maxillofacial Emergency Database. To create uniformity across the Maxillofacial Database to provide accurate and secure data capture system for future audits and studies

Gold Standard: Not stated

Materials & Method: Prospective audit carried out over 18 months using data recorded on a Designed Microsoft Access programme made by a previous Maxillofacial SHO for Chesterfield Maxillofacial emergencies.

Results: The number of maxillofacial Emergency Data Capture forms submitted over the 18 months period was 780. The aetiology was trauma in 638 cases, non-trauma in 51 cases and in 91 cases the aetiology was unknown.

Conclusion: Improve SHO compliance in capturing data for the Emergency Data Capture form by providing them with Palm PDA's.

Patient compliance with out patient attendance following treatment for mandibular fractures
Shahid Chawoo: Derby

Aims & Objectives: To assess outpatient attendance patterns after mandible fractures.

Gold Standard: Local Trust failure rate <10%

Materials and Method: Two phase audit to determine attendance rates before and after introducing a set of guidelines. The preliminary audit examined attendance rates of 73 mandible fractures and these results were used to create a Trust policy. 50 subsequent fractures were audited.

Conclusion: The preliminary audit confirmed tat 59% of patients fully, and 20% partially, complied with their review appointments. 21% failed to attend any out-patient review.

The guidelines that were introduced limited review to 1 week and 6 weeks post-injury. Attendance rates increased to 98% (week 1) and 90% (week 6).

Reviewing mandible fractures generates additional workload in the out-patient clinic. Compliance is generally poor and the failure rate increases after the first appointment, resulting in wasted clinic capacity. Standardising the review interval to week 1 and 6 achieves an overall compliance rate of 94%.

An audit of parotidectomies over a four year period.
Smriti Bhakta : Chesterfield

Aims & Objectives: To assess the use of investigations in parotid surgery and to review post-operative morbidity following parotid gland surgery.

Gold Standard: Specific for particular investigation and post-operative complication

Materials and Method: Retrospective audit, 120 patients identified and 93 patient's records examined to date.

Results: investigation matched the final diagnosis in 53%, investigation gave no conclusive diagnosis in 12%, investigation did not match final diagnosis in 35%, number of patients with post-op problems was 62, most commonly complaining of numbness, persistent pain and Frey's syndrome.

Conclusion: Half of FNA samples were non diagnostic. FNA had good accuracy in diagnostic samples. Higher incidence of VII nerve weakness (greater proportion of malignancies). Gtr auricular nerve pain (consent). VII n branches affected & duration (documented).

A retrospective audit on referral letters for apicectomy sent by GDP's
Santosh Sinha : Lincoln

Aims & Objectives: To improve the quality of referral letters for apicectomies.

Gold Standard: The authors decided that all referral letters should contain information regarding the patient details, up to date medical history, recent radiographs of the relevant tooth and a valid reason for the apicectomy.

Materials & method: A prospective study where data was collected from the patients records. The first cycle lasted for two months, after which all GDP's in the Lincolnshire area were sent a letter concerning the referrals of apicectomy. The second cycle of data collection followed the same earlier process but lasted only a month.

Results: 28 referral letters collect for first cycle and 11 letters collected for re-audit. Out of 11 letters, 4 letters scored 5/5 (36%), whereas in the first cycle out of 28 letters only 2 letters had scored 5/5 (7%).

Conclusion: There had been an improvement in the quality of the referral letters. But a drawback of the audit was that during the re-audit process data was only collected for one month rather than two as in the first cycle.

An audit of outcome after apicectomy under local anaesthetic: frequency of review and failure rate.
Nilema Nathani : Derby

Aims & Objectives: To determine the failure rate of apicectomies, determine factors predisposing to failure, to determine frequency of post-op radiographs and set standard for post-op review.

Gold Standard: Not stated.

Materials & Method: Retrospective audit of 65 patients case notes and radiographs.

Results: Frequencies of x-rays after apicectomy, out of 35 procedures: single review & single x-ray = 31 (89%)two reviews & x-ray at each visit = 4 (11%). Overall failure rate = 21%. Equivalent failure rate between amalgam and IRM. Failure rate dependent on grade of operating surgeon. Very few patients received more than one review appointment.

Conclusion: Patients should have post-op review at 6 weeks with x-ray and 12 months with x-ray. Improved junior staff training and improved case selection. Re-audit in 6 months.

An audit of the management of patients with premalignant oral conditions
Kirsty Gayton : Lincoln

An audit of qualities of dental radiographs taken in general dental practice and in Chesterfield Royal Hospital
Fatima Alsayer : Chesterfield

An audit of preoperative tests for elective surgery
Danielle Stephenson : Rotherham

Wessex — Nick Baker

Department of Oral and Maxillofacial Surgery, Poole Hospital NHS Trust 2005

Must we perform haematinic investigations for patients with sore mouth or tongue?

This was a retrospective audit of patients attending the Department of Oral and Maxillofacial Surgery. The aim was to investigate the need to perform a full haematinic profile on patients who present with symptoms suggestive of burning mouth syndrome. One hundred and one patients were studied.

The most salient features of the results showed that 22% of non-anaemic patients with sore mouths/tongues had decreased levels of serum ferritin, while 17% of patients with normal MCV had low serum ferritin. Thirteen percent of patients with low MCV had decreased levels of serum ferritin and 15% of patients with normal MCHC had low serum ferritin. Only 13% of patients with low MCHC had corresponding decreased levels of serum ferritin.

It was concluded that it is necessary to perform not only a full blood count, but also a full range of haematinic investigations (Vitamin B12, Ferritin and Red Cell Folate) to diagnose potential deficiencies in patients with sore mouths/tongue.

Patient satisfaction audit.

This was a prospective audit carried out between February and July 2005. The study group was of patients attending outpatients and day surgery for

dermatological surgery under local anaesthetic. A total of 60 patients completed a questionnaire containing 32 questions relating to the treatment they had received

The audit demonstrated that the service provided to these patients was as expected with adequate explanation of procedures, highly professional performance of procedures, an appropriate environment for procedures and provision of satisfactory post-operative instructions. There were very few negative comments and the majority of patients were satisfied with their overall treatment experience.

Maxillofacial unit, Salisbury District Hospital

Patient satisfaction study of craniofacial prosthesis

A questionnaire-based study was undertaken to evaluate the satisfaction of patients rehabilitated with a craniofacial prosthesis provided by the maxillofacial department at Salisbury District Hospital.

A sixteen point questionnaire was sent out to 29 patients which attempted to evaluate the demographic details of the patients in addition to the type of prosthesis, method of fixation, number of visits prior to delivery, patients satisfaction and social interactions with family and wider community, specific problems and issues with the prosthesis and the ease of care.

Eighteen questionnaires were returned and formed the basis of the audit. There were fifteen males and three females with an age range of 13 to 80 years (mean 49 years). The prosthesis was used to reconstruct the nose in 4 patients, ear in 11 patients, eye in 2 patients and a combination of the above in 1 patient. The underlying problem, which necessitated the prosthesis, was trauma in 4 patients, neoplasm in 8 patients and was congenital in 6 patients.

Eighty eight percent of the prostheses were retained by an implant. 94% of the prostheses were delivered within 10 visits and 76% within five visits. 59% of the prostheses were more than a year old and 23% were less than 6 months old. Patients were concerned by the colour match in 41% of cases and became an issue at around 6 months post delivery. 11% were concerned regarding the shape of the prosthesis and 29% had trouble keeping the prosthesis in place.

Ninety four percent of patients felt that they enjoyed life to the same (39%) or higher degree (55%) following prosthetic rehabilitation. 94% of patients also felt the same or improved confidence with their interaction with the family and strangers. All patients who worked felt the same (62%) or improved (38%) confidence at the work place. 47% of patients found keeping the prosthesis and implant site clean was difficult. 42% requested advice on coping skills and 33% requested opportunities to meet other patients with prostheses.

The above results demonstrate that the provision of a craniofacial prosthesis can offer greater enjoyment of life and improve confidence and social interaction in this group of patients. However, colour match and hygiene are important areas of concern. In addition as a service provider we should consider reducing the number of patient visits and offer advice on patient groups and social skills.

Audit of facial nerve dysfunction after superficial and total parotidectomies.

The incidence of facial nerve dysfunction was assessed in 21 consecutive patients who underwent a superficial or total parotidectomy at Salisbury District Hospital. The factors analysed were the demographic details of the patients, size and histology of the tumour, extent of parotidectomy, seniority of operator, intra-operative use of nerve stimulator and the immediate and long-term incidence of facial nerve dysfunction.

The patients' ages ranged from 38 – 83 years (mean 63 years) and the histology was that of a benign neoplasm in 16 patients (Warthin's - 9, Pleomorphic adenoma -3, Lipoma - 2, others -2), malignant neoplasm in 4 patients and chronic inflammation in 1 patient. The size of the tumour ranged from 10 mm to 55mm in maximum diameter. The operation was performed / done in the presence of a consultant in 19 cases (91%) and by a registrar in 2 cases. 18 patients (86%) underwent a superficial and 3 a total parotidectomy. A nerve stimulator was used intra-operatively in 13 cases (62%). One patient had pre-operative facial nerve weakness (malignant tumour). Nine patients (43%) were found to have some facial nerve weakness in the immediate post operative period and two patients (10%) had residual weakness in the long term.

Analysis of the above results did not reveal any association with patient age, use of nerve stimulator and seniority of operator and immediate facial nerve dysfunction. Temporary facial nerve weakness was however more common with larger tumours, malignant lesions and following total parotidectomy. Long term facial nerve weakness (2/21) was only

associated with total parotidectomy and in one patient this was evident pre-operatively.

The above results are comparable to those reported in the literature

Maxillofacial Unit, St. Richard's Hospital, Chichester

An audit of the diagnostic quality of digital OPGs used for assessing lower third molars

Digital radiographs may be viewed on a computer screen or as a printout. An audit of 50 digital OPG's taken to assess lower third molars was completed. Criteria assessed included third molar size, shape, number of roots, caries and the relationship of the third molar to the inferior alveolar canal.

Radiographs viewed on a computer screen were compared with the printout version by a single clinician. It was possible to assess the size and shape of the crown for 100% of third molars viewed on the screen and as a printout. Other criteria including number of roots (80% on screen; 64% on printout), extent of caries (55.6% on screen; 25.9% as a printout) and relationship to the inferior alveolar canal (60% on screen; 42% on printout) were better demonstrated by viewing the radiograph on screen than by printout.

On the whole third molar assessment is more accurate when viewing the radiograph on a monitor than in a printed format.

A regional audit of the management of white patches in the South-West Thames Region

A regional audit was carried out in the South-West Thames Region to establish how many new patients with white patches were being biopsied, and whether experienced clinicians biopsied less. The aim was to develop guidelines to assist the clinician in deciding whether to biopsy.

A proforma was completed for each new patient seen with a white patch during a three-month period. There were 77 completed forms of which 77% where GDP referrals, 20% were GMP referrals and 3% were from other hospital specialties. 70% of white patches were biopsied, and of these 16% were done urgently. There was an approximately equal distribution with regards to number of patients seen between Consultant, SpR, SAS and SHO grades. However, Consultants were least likely to organise a biopsy.

Given the relatively small number of returns for a large region, it was inappropriate to issue guidelines. The decision to biopsy should be based on clinical suspicion.

Maxillofacial Unit, Southampton General Hospital

Audit into the delay in treatment from time of placement on emergency operating list to actual treatment

An audit was undertaken to assess the delay in treatment for emergency maxillofacial trauma patients. Patients with maxillofacial trauma are treated on elective lists whenever possible. A lack of operating theatre time often means that patients with maxillofacial trauma are treated on the emergency operating lists. Patients compete with other surgical specialties for access to these lists based on clinical need. Maxillofacial trauma patients have relatively lower clinical need than other acute surgical emergencies and may be cancelled as a result of this.

This audit demonstrated that the mean wait to access emergency theatres has increased from 14 hours to 24 hours since a similar audit was carried out three years ago. The audit has provided further evidence that an elective maxillofacial trauma list is necessary to reduce the time from admission to treatment for this cohort of patients.

West Midlands — Keith Webster

Craniofacial Unit

Correlation between clinical photographs, plain films and CT scans as a means of assessing cranial index

This study showed that outcomes can be reliably taken using Cranial index measured clinically and avoiding use of post-op radiographs or CTs

Audit of the outcome of conservative management of posterior plagiocephaly due to moulding

Some patients with moulding improve with conservative management, others do not. A prospective study comparing with the use of moulding helmets is required, a protocol is currently being written

Audit of the outcome of subtotal calvarial remodeling for the management of sagittal synostosis – revised technique

This will show improved results with the new technique between 2000 and 2004. The technique has been further refined to reduce bitemporal hollowing and will be re audited next year.

Outcome of fronto-orbital advancement and remodeling in craniosynostosis

Results showed good outcome by reduction in deformity scores, non syndromic patients benefited more than syndromic patients from this type of surgery

Speech and cognitive deficits in metopic synostosis

There is a higher than expected prevalence of cognitive deficits in metopic synostosis (48%) compared with previous studies, the reasons for this will be investigated. It may be due to better screening for problems and will lead to improved access for SLT for these children.

Audit of Metopic synostosis referral to and management in BCH Craniofacial Unit

There is a global anecdotal increase in the incidence of metopic synostosis, this study confirms a real increase in numbers and proportion of our caseload. We looked at patient demographics and suggested ways to look for the reasons for the increase.

How multidisciplinary are we? An audit of team

This audit shows that on the whole the team works well in a multidisciplinary way, but highlights some deficiencies e.g. need for further neurosurgical input which will be provided

An audit of BCH Craniofacial website use
This study looked at barriers to communication, ease of access to our website and audited its use. Suggestions were made for improvement.

Cleft Service Mr Sharp:

Ongoing data collection for ABGs is being carried out through the Cleft database.

Two years of ABG outcomes have been audited- this will form the basis of a paper at the Craniofacial Society meeting in Birmingham in April.

Audit of waiting times for Head & Neck Cancer Patients.

Mr Webster/Parmar/Martin

The head and neck group received 105 new referrals over a six month period. 20% came via the two week wait. 14 out of 60 patients exceeded the 31 day target from intention to teat to treatment and 7 out of 60 patients breached the 62 day initial referral to first treatment target. The breaches mainly occurred in thyroid cancer patients and patients with a complex history who needed opinions from other specialties.

Audit of wait to see Maxillofacial Team in A&E dept
Mr Webster/Youssefpour

Although there is a four hour wait target in A&E, patients referred to Maxillofacial Surgery by GP's or A&E need to be seen in A/E. A prospective four week of audit times showed most delays are due to the SHO being scrubbed in theatre. We now arrange to see non urgent cases in the early afternoon when the SHO is more likely to be available.

Audit of use of Liebinger® Orbital Floor Plates
Mr Speculand/Youssefpour

33 patients with Liebinger® orbital plates were reviewed. All patients were treated within three weeks with no cases of infection or plate removal. Patients who were operated on later than three weeks had a poor orthoptic outcome

A comparison of MRI and arthroscopy findings in TMJ dysfunction patients
Mr Speculand/ Dr Hejmadi

An audit of the Role of TMJ total joint replacement
Mr Speculand/ Hensher/Evans

Quality Assurance audit of intra-oral radiographs (City Hospital)
Dr Martin/ Dr Sheikh

Between 2003 and 2004 74 intraoral radiographs were taken. 76% had good diagnostic value, 14% had some diagnostic value and 10% had no diagnostic value. These figures were within the criteria set by NRPB.

Compliance with NICE Guidance on 3rd molar removal
Mr Lopes/Dr Kim/ Mrs Lopes

A total of 300 patients recorded prospectively at three units (City, Sandwell and University Hospital) 60% of referrals were compliant and a further 30% were not compliant but went on to have surgery. All

operated patients were compliant with the guidelines. Although dentists may not complete this information on the referral letter the patients referred were appropriate.

Are postoperative radiographs needed in facial trauma?
Mr Lopes/Dr Bali

A total of 270 non complicated fractures were surveyed. Radiographs did not alter the postoperative management in any. The return to theatre rate was about 1.6% and the decision to re-operate was made clinically, not on the radiographs

A prospective evaluation of shoulder function following selective neck dissection
Mr Webster/Lopes/Grew/Dr Alana

A prospective audit of Mandibular fracture complications
Dr Godbold/Mr Lopes

A study of270 fractured mandibles operated in one year. Early results show that using external oblique ridge plates, leaving wisdom teeth in fracture line and suboptimal management of condylar fractures are recurring themes. Departmental guidelines to address these problems will be formulated.

Audit of compliance with European Society of Oral Medicine management of oral lichen planus.
Mr Lopes/ Dr Khan

15 patients recruited. Most patients had not been given antifungals or adequate advice on use of medication.

Compliance with British Society of Paediatric Dentistry guidelines on the management of traumatised adult dentition
Dr Ujam

Traumatised teeth are not being adequately splinted as suitable equipment is not available in the A/E Dept. In future such trauma will be referred to the dental hospital

Audit of blood use in orthognathic surgery
J Sebastian

An audit of blood use shows there is no need to cross match blood for all orthognathic surgery. Anaesthetists appear to consistently over request blood.

No need to x match, anaesthetists over order bloods

Birmingham Children's Hospital

Antibiotic prophylaxis guidelines for paediatric cardiac patients
Mr Monaghan/ Dr Bhogal Dr Hutton

An audit of practice at Birmingham Children's Hospital showed that the recently introduced changes announced nationally have led to confusion and that partly this is due to discrepancies in the guidance given for procedures under LA or GA

Audit of storage of intra oral x-rays
Dr Hutton/Dr Bhogal

The use of a new x-ray packet located in the notes reduced the loss of intra-oral radiographs.

Paediatric Trauma audit
Dr Idle/ Dr Addison

An analysis of 200 operated paediatric trauma cases showed a significant increase in mandibular fractures in juvenile boys due to inter-personal violence

Maxillofacial Dept City Hospital

1. Quality assurance audit on intra-oral radiograph.

2. Success and Prognosis of transplantation of impacted canine into dental arches

3. NICE Guidelines on removal of third molars and how these are followed by referring general dental practitioners.

4. Regular audit for standard of Clinical Care Records as a part of Clinical Effectiveness at City Hospital which is carried out every year for at least 10 clinical notes.

5. Consent taken at the time of making clinical decision for any surgical intervention

Maxillofacial Lab

- Audit of: Baha implant success rate and skin complications

  SJW, Maxine Brine (nursing)
- New joint prosthetic clinics with Plastic Surgery for potential prosthetic/autogenous auricular reconstruction.
- Development of software for Craniofacial applications and implant design and production

Benchmarking:

There are three benchmarking studies being performed in collaboration with our national association: DVT, MRSA, Management of Facial Skin Cancer.

Regional Audit

Antibiotic Prophylaxis in the management of compound mandibular fractures treated by open reduction and internal fixation

The use of prophylactic antibiotics in surgery is controversial and there has been an increasing trend over a wide range of surgical specialties to reduce the use of prophylactic antibiotics to cover the peri-operative period. Antibiotic prophylaxis has become more topical as the incidence of and media interest in MRSA increases.

Published infection rates for open reduction and internal fixation of mandibular fractures range from 2.5% to 7.85%. Antibiotic Prophylaxis has been shown to significantly reduce infection, but there is little published data on selection of antibiotics and the length of antibiotic treatment

An initial survey of all Maxillofacial Surgery Units within the Yorkshire region revealed

that a variety of broad-spectrum antibiotics were prescribed for patients undergoing open reduction and internal fixation (ORIF) of compound mandibular fractures. A minimum of three days of post-operative antibiotics were prescribed.

Aims

1. To establish the rate of infection for ORIF of compound mandibular fractures across the region using current antibiotic protocols and compare with published figures.
2. To agree a common short peri-operative antibiotic regimen for patients undergoing ORIF of compound mandibular fractures to be used in all units across the region.
3. To establish if a change in antibiotic protocol affects the infection rate for ORIF of compound mandibular fractures

Stage 1

Method

"Gold Standard" To determine whether current infection rates following ORIF of compound mandibular fractures, in Maxillofacial Units in the Region are in line with published figures (2.5 – 7.85%).

Prospective audit of consecutive patients presenting to the five Maxillofacial Units in the Yorkshire region who underwent ORIF of compound mandibular between 01.01.2005 and 20.09.2005.

Criteria for diagnosis of post-operative infection

Pus from wound site

Increasing pain and swelling at wound site $\geq$ 5 days post op

Wound sinus or granulation tissue

Wound breakdown

Patients followed for up to 4 weeks post-op

Results

Total returns	145
Average age:	27.3 years Range: 7 – 88
Number of infections:	15
Infection Rate:	10.3%

Stage 2

A regional peri-operative antibiotic prophylaxis protocol has now been agreed:-

Amoxycillin 500mg IV and Metronidazole 500mg IV

Commenced on admission to hospital given 8 hourly to include two post-operative doses only

Penicillin allergy substitute Clarithromycin 500mg IV 12 hourly (again to include two post operative doses)

This protocol will commence 01.01.2006 and the infection rate re-audited across all units in the region from 01.01.2006 to 30.09.2006

Regional Meetings

Regional meetings take place three times per annum. One meeting per annum is a multidisciplinary meeting dedicated to clinical effectiveness presentations. This years meeting was hosted at

Leeds Dental Institute in March. The meeting opened with a talk by our guest speaker, Chris Hargraves, Chief Executive NCEPOD "15 Years of NCEPOD Reports and Looking Forward". This was followed by multidisciplinary presentations of audit carried out by all grades of staff across the region.

1)Does the Content of Referral Letters allow for Adequate Processing and Prioritisation? Mr K D Mizen

2)Radial Forearm Free Flap Care Pathway Ms A Heale

3)Plating Kit Evaluation Audit Dr V Kavi

4)Zinc Audit Mr K D Mizen

5)Informed Consent Audit Mr P D Walker

6)Audit of Arthroscopy / Arthrocentesis of the TMJ. Dr H Maghaireh

7)Preliminary Report on the Shoulder Function Audit. Ms R Davis

8)The Benefits of nerve Stimulation for Oral and Maxillofacial Surgery Patients. Ms L Mezei

9)Evaluation of Standard of Maxillofacial Medical Note Keeping Using the CRABEL Score System. Mr A Kumar

10)Audit of the Inclusion / Adequacy of Radiographs provided by GDPs for Dento-alveolar Procedures at Pinderfields Oral and Maxillofacial Department Dr C Barker

11)Protocol Development for Management of Bacterial Skin Infections Dr R Benson

Correction to Clinical Effectiveness Matters 2005

Retrospective Audit of Apicectomies

Noel Perkins Chesterfield

The audit report published recorded that the gold standard for the audit was not stated.

This was an error, the gold standard used for the audit was:

Surgical Endodontics Guidelines (Royal College of Surgeons of England, 2001).

Correspondence to

Mr I Holland
Honorary Editor - Clinical Effectiveness Matters
Dept Oral & Maxillofacial Surgery
Southern General Hospital
Govan Road
Glasgow
G51 4TF
E-mail ian.holland@sgh.scot.nhs.uk

Clinical Effectiveness Committee

Stephen Layton Chairman
Patrick Magennis
Gary Cousin Secretary
Ian Holland Editor
Tim Blackburn
Richard Crosher
Rodger Godfrey
Keith Webster

Telephone or Fax enquires

Telephone 0141 201 2834
Fax 0141 232 7508

Regional Audit Coordinators

Armed Forces	Andy Gibbons	andrew.gibbons@pbh-tr.nhs.uk
Beds, Herts & Bucks	Chi-Hwa Chan	chchan@btopenworld.com sent email
Isle of Man	Roger Godfrey	omf@manx.net
Merseyside	Patrick Magennis	maxfac@tiscali.co.uk
North East Thames	**Vacancy**	
North West Thames	Simon Holmes	sbholmes1@mac.com
North West	Steve Langton	langts@midthird.demon.co.uk
Northern Ireland	**Vacancy**	
Northern	Richard Langford	langfordnorton@hotmail.com
Oxford	Nad Saeed	Nad.Saeed@orh.nhs.uk
Republic of Ireland	Cliff Beirne	beirnesec@stjames.ie
Scotland	Ian Holland	ian.holland@sgh.scot.nhs.uk
South Thames	Carrie Newlands	carrie-newlands@gascony.freeserve.co.uk
South West	Peter Revington	peter.revington@north-bristol.swest.nhs.uk
Trent	Stephen Layton	Layton@doctors.org.uk
Wales	**Vacancy**	
Wessex	Nick Baker	nick.baker@suht.swest.nhs.uk
West Midlands	Keith Webster	k.webster@bham.ac.uk
Yorkshire	Paul Whitfield	paul.whitfield@york.nhs.uk

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