

Abstracts of trainees' oral presentations at the summer meeting of the Scottish Otolaryngological Society, 7–8 May 2009, Pitlochry, Scotland, UK

Aetiopathogenesis of human papilloma virus in malignant disease: evidence for a global immunisation programme (review)

M S Miah, R A Crosbie, R E Mountain, S Mahendran
From Ninewells Hospital and Medical School, Dundee, Scotland, UK

Objectives

To establish the evidence for a relationship between human papilloma virus (HPV) and malignant disease in anatomical regions other than the cervix, and to question whether this evidence supports a global HPV immunisation programme irrespective of gender and geography.

Method

Literature review of all previously published studies and reviews.

Results

Between 1982 and November 2008, more than 600 studies and 116 review articles have been published on the detection and genotyping of HPV in carcinomas involving sites other than the cervix. Human papilloma virus DNA has been found in significant proportions of vaginal (90 per cent), vulval (40 per cent), anal (90 per cent), penile (50 per cent), lung (79 per cent) and colorectal (100 per cent) carcinomas. Up to 100 per cent of upper aerodigestive tract carcinomas (including those of the oesophagus) have been found to be HPV DNA positive, with tonsillar carcinomas demonstrating the strongest association. Up to 95 per cent of HPV-positive carcinomas contain HPV16/18 DNA.

Conclusion

This review found sufficient evidence to support a global immunisation programme, in order to help reduce the incidence of HPV-related malignant disease.

Utility of trans-nasal oesophagoscopy in select patients with head and neck symptomatology: pilot study

S Hasan, S Ali, I Ganly
From the Royal Infirmary of Edinburgh, Edinburgh, Scotland, UK

Introduction

A pilot study was conducted to assess the feasibility of performing trans-nasal oesophagoscopy in the ENT out-patient clinic under local anaesthetic, in selected patients.

Method

Thirty patients with oesophageal symptoms underwent trans-nasal oesophagoscopy under local anaesthesia in an out-patient setting.

Results

Patients' ages ranged from 35 to 87 years. All patients tolerated the procedure well. The main findings were

globus ($n = 15$), tracheoesophageal valve problems (four), Barrets oesophagus (three), gastroesophageal reflux disease (three), tumour (one), oesophageal stenosis (one) and oesophageal dysmotility (one). Ten patients were discharged after one consultation; the remainder were referred on for further investigation.

Conclusion

In select patients, trans-nasal oesophagoscopy can play a role in the diagnosis and assessment of oesophageal symptoms. It is well tolerated by patients and easy to perform. It results in significant financial savings, compared with rigid oesophagoscopy, due to avoidance of general anaesthesia and hospital admission.

Radiological staging of thyroid nodules: a useful tool?

A Chin, S Lim*, T Kunanandam†, G Dewar*, S K Kang*
From Glasgow Royal Infirmary, *Monklands General Hospital, Airdrie, and †Stobhill Hospital, Glasgow, Scotland, UK

Background and aims

In the UK, the assessment and classification of thyroid nodules involves ultrasonography (US) and fine needle aspiration cytology (FNAC). We propose a numerical radiological staging system for thyroid nodules.

Method

Seventy-eight patients underwent US and thyroid surgery over a 30-month period. Histopathology and conventional classification were compared with the proposed radiological staging system.

Results

Thirty-two patients were staged as level two (i.e. benign nodules) using the proposed radiological staging system, with two false negatives (both patients had papillary carcinoma, conventionally staged as levels two and four, variously). Twenty-six patients had radiological staging level three (i.e. follicular neoplasm could not be excluded), with a malignancy rate of 26 per cent; in this group, two patients with follicular carcinomas were conventional staging level two. Radiological staging levels four (i.e. suspicious for papillary lesion or intra-thyroidal malignant nodules) and five (i.e. extra-thyroidal or metastatic nodal features) had a positive predictive value of 100 per cent and a sensitivity of 90.5 per cent. Radiological staging level five had the extra benefit of detecting extra-thyroidal disease.

Conclusion

Radiological staging levels four and five are powerful indicators of malignancy. In the presence of radiological staging level four and lower conventional staging levels, we suggest repeating the FNAC or performing a hemithyroidectomy.

Can playing the trumpet stop snoring?

S Ravichandran, S Robertson, M Hair, P Wardrop
From Crosshouse Hospital, Kilmarnock, Scotland, UK

Background

Snoring is a common presentation to the ENT out-patient department. Once obstructive sleep apnoea syndrome is excluded, there remains the social problem that is usually the presenting complaint. Current techniques in the management of non-apnoeic snoring comprise continuous positive airway pressure, mandibular advancement devices and surgery. All have disadvantages. A recent study suggested that playing the didgeridoo may reduce snoring. Our study investigated whether regular playing of more familiar western wind and brass instruments could also reduce snoring and improve sleep quality.

Subjects

Musicians from Scotland's five professional orchestras.

Method

Every member of the participating orchestras was asked to complete an anonymous questionnaire. The questionnaire was in three parts: part one assessed basic biometric data including age, gender, body mass index and, for men, collar size; part two assessed the Epworth Sleepiness Score; and part three comprised the Snoring Outcomes Survey, a validated, self-reported snoring assessment tool. Scores for brass and wind players were compared with those for musicians playing other instruments, who acted as controls.

Outcomes

From 340 subjects, 247 questionnaires were returned. The results are discussed in comparison with other snoring treatments and the few other existing studies of this kind.

Benefits of contralateral routeing of signal hearing aids in patients with single-sided deafness

K A McAllister, J A Crowther, R Bakey, C Eckard
From the Southern General Hospital, Glasgow, Scotland, UK

Objective

To assess the benefit from contralateral routeing of signal hearing aids in patients with single-sided deafness.

Method

A single-sided deafness questionnaire was filled out by patients before and after fitting of a contralateral routeing of signal hearing aid. A Glasgow Benefit Inventory questionnaire was completed on long term follow up.

Results

Twenty patients participated in the study. Eleven of these 20 patients had acoustic neuroma, one had undergone a previous labyrinthectomy and the remainder had single-sided deafness of other aetiology. There was a statistically significant difference between patients' disability scores before and after fitting of a contralateral routeing of signal hearing aid, on both short term ($p = 0.0018$) and long term ($p = 0.0011$) follow up. The Glasgow Benefit Inventory total score was +21.

Conclusion

Contralateral routeing of signal hearing aids provide a useful alternative to bone-anchored hearing aids in patients with significant disability from single-sided deafness.

Further advancements in the design of these hearing aids may increase their potential benefit.

Saliva control clinic for neurologically impaired children: three-year experience

A T M Mace, R Lumley, H Kubba
From the Royal Hospital for Sick Children, Glasgow, Scotland, UK

Objective

This study aimed to review the management strategy in a multidisciplinary paediatric saliva control clinic.

Method

We analysed retrospectively the clinical records of patients managed in the clinic between 2005 and 2008. Management included oral-motor training, medication prescription, salivary gland botulinum toxin injections, management of exacerbating factors, and surgery.

Results

One hundred and twenty-five (82 per cent) children had an underlying neuromuscular disorder. Oral-motor training was an integral part of the management of 99 (65 per cent) children. Ninety-three (60 per cent) children were treated with hyoscine; 24 (30 per cent) developed a rash due to transdermal hyoscine. Fifty (33 per cent) children were treated with salivary gland botulinum toxin injections, and 25 (16 per cent) with salivary gland surgery. Seven (14 per cent) children developed dysphagia following botulinum toxin injection.

Conclusion

A team approach has worked well in the management of drooling in children with neuromuscular disorders. A tiered management strategy is beneficial in dealing with a problem which frequently must be prioritised amongst a range of complex medical problems.

Pharyngeal pouch surgery in North Glasgow: National Institute for Health and Clinical Excellence practice or not?

J C L Yeo, K MacKenzie
From Glasgow Royal Infirmary, Scotland, UK

Objective

We evaluated pharyngeal pouch surgery in North Glasgow, reviewing our practice in relation to National Institute for Health and Clinical Excellence (NICE) recommendations regarding such surgery.

Method

We reviewed the case notes of patients who had undergone pharyngeal pouch surgery between 1998 and 2008. Data obtained included patient demographics, procedures performed, complications and outcomes.

Results

We identified 88 patients who had undergone primary pharyngeal pouch surgery. The procedures were performed by eight consultant otolaryngologists, and comprised: planned endoscopic stapling ($n = 63$); endoscopic laser surgery (20); external approach (three); and pharyngoscopy with dilatation (two). Endoscopic stapling was abandoned in nine patients. The endoscopic stapling perforation rate was 3.2 per cent. Seventy-seven per cent of patients reported a marked improvement in swallowing

post-operatively. Sixteen patients required revision surgery.

Conclusion

Our practice did not reflect NICE recommendations. Our series showed similar complication rates to other published series, although the proportion of our patients reporting post-operative improvement appeared to be lower than that of other series.

Outcome assessment for endonasal dacryocystorhinostomy

I F Hathorn, P Ross, P M Spielmann, B Parcell, Y Sim, P White

From Ninewells Hospital and Medical School, Dundee, Scotland, UK

Objectives

To assess endonasal dacryocystorhinostomy (DCR) outcomes, and to establish a correlation between assessment methods.

Method

Prospective audit of patients undergoing endonasal DCR ($n = 121$). A 10-cm visual analogue scale (VAS) was used to assess pre-operative epiphora. At post-operative follow up (at three and nine to 12 months), a further VAS score was established and a functional endoscopic dye test performed. The Glasgow Benefit Inventory questionnaire was also completed.

Results

The mean VAS score was 8.42 pre-operatively and 1.74 post-operatively. The average VAS score reduction was 6.17 at three months and 6.91 at final assessment ($p < 0.001$). The post-operative Glasgow Benefit Inventory score was 33.

The functional endoscopic dye test was positive in 90 per cent of patients at three months and 93 per cent at final assessment. The difference in VAS score at final assessment correlated positively with functional endoscopic dye test results (Pearson correlation: 0.595 at three months and 0.562 at final assessment). The Glasgow Benefit Inventory score correlated positively with the VAS difference at final assessment (0.359).

Conclusion

There was a positive correlation between outcome measures used to assess DCR. Endonasal DCR had a positive impact on patients' symptoms and general well-being.

Voice therapy for dysphonia, 10 years later: more science than art?

R R Locke, C Dunnett, K MacKenzie

From Glasgow Royal Infirmary, Scotland, UK

Introduction

Approximately 10 years ago, a questionnaire-based survey was undertaken to assess speech and language therapy practice in relation to five common clinical scenarios. This survey was repeated 10 years later to assess current practice in the light of new evidence.

Method

Due to changes in the management structure of speech and language therapy and voice interest groups, we used a different method of distributing the questionnaire, compared with the earlier survey; questionnaires were sent to

individuals on the specialist interest group register, and also to speech and language therapy departments.

Results

The 1997 survey had 163 replies, compared with 149 in the 2008 survey. Overall, survey responses indicated little change over the intervening 10 years, with considerable variation in individual practice and poor consensus between therapists.

Conclusion

Survey assessments relating to chronic laryngitis and Reinke's oedema revealed the most change, with the 2008 survey indicating a greater consensus on management, compared with the 1997 survey.

Force measurement during endoscopic sinus surgery

P Ross, P Joice, D Wang, E W Abel, P White

From Ninewells Hospital and Medical School, Dundee, Scotland, UK

Objective

To measure peak osteotomy force during ethmoid sinus surgery.

Study design

Prospective, consecutive cohort of 25 patients, compared with 15 formalin-fixed cadaver heads.

Method

A modified Storz sinus curette measured osteotomy force (measured in N units) delivered to the uncinata, bulla ethmoidalis and ground lamella.

Results

The mean osteotomy force applied in live patients was 9.6 N (95 per cent confidence interval (CI): 8.9–10.4 N). The mean osteotomy force applied in the cadaver heads was 6.4 N (95 per cent CI: 5.7–7.0 N). Uncinate osteotomy required 1.9 N (95 per cent CI: 0.2–3.5 N) more force than ground lamella osteotomy ($p = 0.025$). Ethmoid osteotomy in live patients required 3.2 N (95 per cent CI 2.1–4.3N) more force, compared with cadaver heads ($p = 0.0001$). This was statistically significant at the bulla ethmoidalis and the ground lamella but not at the uncinata. More force was required in female patients than male patients ($p = 0.03$).

Conclusion

Ethmoid sinus lamellae in living patients require a mean osteotomy force of 9.6 N, 1.5 times greater than that required in cadaver tissue. This has implications for training using cadaveric material.

Analgesia requirements of patients in day-case ENT surgery

R Srivastava, G Haveron, L J Clark, J A H Davidson, B J G Bingham

From the Southern General Hospital, Glasgow, Scotland, UK

Introduction

Post-operative pain can be particularly severe in the early stages of recovery, and effective post-operative analgesia is essential to minimise the risk of delayed recovery. We aimed to audit the analgesia requirements of one consultant's day-case ENT surgery patients, at the Southern General Hospital, Glasgow, Scotland, UK.

Method

Patients were prescribed analgesia on discharge. They were contacted post-discharge and questioned regarding: pain levels encountered, usage pattern of analgesia prescribed, analgesia efficacy, and any other problems. Data were collected prospectively from September 2007 to August 2008, and analysed retrospectively.

Results

Eighty-seven out of 121 patients (72 per cent) were contactable. Thirty-four patients (39 per cent) reported experiencing no pain, 36 (41 per cent) encountered mild pain, and 12 (14 per cent) did not have their result documented.

Sixty-three patients (72 per cent) reported using their analgesia. Overall, 52 patients (60 per cent) reported their analgesia to be effective, 14 patients (16 per cent) did not require any analgesia, and the remaining 16 patients (14 per cent) did not respond.

Conclusion

Sixty per cent of patients reported their analgesia to be effective. No patients reported their analgesia to be ineffective. Only 6 per cent of patients reported pain control to be an issue. These data indicate that the majority of day-case ENT surgery patients surveyed received adequate analgesia.