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The benefit of silicone stents in primary endonasal dacryocystorhinostomy: a systematic review and meta-analysis

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Aims

A systematic review and meta-analysis were conducted to evaluate the success rates of endonasal dacryocystorhinostomy with and without silicone tubing, and to thus determine its benefit in primary endonasal dacryocystorhinostomy.

Methods

A literature search was performed using 10 databases. This review was limited to randomised, controlled trials (RCTs) published in English language. Risk of bias was assessed using the Cochrane Collaboration's risk of bias tool. Chi-square and I-square statistics were calculated to determine the presence and extent of statistical heterogeneity.

Results

Five RCTs (447 primary endonasal dacryocystorhinostomy procedures performed on 426 patients) were included. The success rate of endonasal dacryocystorhinostomy with silicone tubing was 93.4 per cent (214 out of 229) and without silicone tubing was 92.2 per cent (201 out of 218). Meta-analysis using a random-effects model showed no statistically significant difference in outcome between the two groups ($p = 0.63$; relative risk = 0.79; 95 per cent confidence interval = 0.3–2.06).

Conclusions

Our review and meta-analysis did not demonstrate an additional advantage of silicone stenting. A high quality, well-powered, prospective, multicentre RCT is needed to further clarify the benefit of silicone stents.

Intratympanic therapy for refractory tinnitus: up-to-date evidence for clinical practice

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Aim

To evaluate the current evidence on the efficacy of intratympanic therapies for tinnitus, using validated questionnaires.

Methods

A systematic review was conducted. An electronic literature search was performed using 10 databases. Randomised, controlled trials (RCTs) investigating intratympanic therapies compared with a placebo or alternate therapy were included.

Results and conclusions

Fifteen RCTs (1144 patients) that compared intratympanic steroids, AM-101, AM-111, gentamicin or latanoprost, with another form of treatment or placebo were analysed. On the basis of three RCTs ($n = 357$), there was limited evidence to support the effectiveness of intratympanic AM-101. Based on eight RCTs ($n = 425$), we found contradictory evidence for the benefit of intratympanic steroids. Results from ongoing multicentre RCTs on AM-101 and intratympanic steroids will help to clarify their efficacy, but there is a need for further targeted RCTs to determine which subgroups of patients are likely to benefit most from intratympanic therapy of steroids or AM-101.

Use of image guidance for endoscopic orbital decompression in thyroid eye disease: does it improve outcomes?

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Introduction

Endoscopic orbital decompression can be used to treat proptosis and raised intra-ocular pressure in thyroid eye disease. Image guidance provides real-time intra-operative anatomical information that may aid more extensive decompression.

Aim

To compare the ophthalmological outcomes of endoscopic orbital decompression with and without image guidance.

Methods

A retrospective review of 34 orbits (19 with image guidance, 15 without image guidance) was conducted, and the outcomes of proptosis, intra-ocular pressure and diplopia were compared.

Results

The mean reduction in proptosis was 3.6 mm with image guidance and 2.8 mm without image guidance ($p = 0.219$). The mean reduction in intra-ocular pressure was 3.6 mmHg and 3.5 mmHg respectively ($p = 0.951$). Two patients developed diplopia following surgery in the group without image guidance. No major complications were reported.

Conclusions

There is a trend for a greater reduction in proptosis with image guidance, but there was no difference in intra-ocular pressure. Our study suggests that image guidance may be a useful adjunct in orbital decompression.

Comparing ultrasound classification with fine needle aspiration cytology in determining thyroid tumour pathology

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Introduction

Thyroid nodules represent a diagnostic conundrum. The aim is to determine whether a thyroid nodule represents a potential malignancy. The role of ultrasound scanning has been controversial; it has been cited as being a cause of over-investigation and contributing to the increase in diagnosis of clinically insignificant thyroid cancers. In July 2014, the British Thyroid Association guidelines introduced the 'U' classification for thyroid masses to rationalise and standardise the investigative pathway, which hopefully reduces the over-investigation of clearly benign nodules.

Aims

To determine the uptake and outcome of the U classification compared with the fine needle aspiration cytology (FNAC) result.

Methods

A retrospective review was conducted of Greater Glasgow and Clyde patients with a thyroid mass who underwent thyroid surgery. The details of ultrasound reporting, FNAC results and ultimate pathology were assessed.

Results

To date, there has been only limited uptake (51.6 per cent) of the U system within Greater Glasgow and Clyde. Of those patients who had thyroid malignancies, 52 per cent had a U3 classification, which corresponded to FNAC results of: Thy1 + 2 in 16.7 per cent of this group, Thy3 in 66.7 per cent and Thy4 + 5 in 16.6 per cent. Twenty-six per cent of malignant cases were classified as U4 + 5, which corresponded to FNAC results of: Thy1 + 2 in 14.3 per cent of this group, Thy3 in 42.9 per cent and Thy4 + 5 in 42.9 per cent. Twenty-two per cent of malignant cases were classified as benign on ultrasound scans; of these, only 7.7 per cent had a corresponding FNAC result of Thy4 or 5.

Conclusion

Our study showed that ultrasound scan classification provides similar accuracy of diagnosis when compared with FNAC, except in cases of suspected malignancy when FNAC adds reliability to the diagnosis.

Post-operative dietary advice and post-tonsillectomy haemorrhage: systematic review

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Introduction

Post-operative dietary advice after paediatric tonsillectomy varies. The extent and type of food eaten may affect children's post-operative haemorrhage risk. Establishing any association could help to reduce post-operative mortality, morbidity and healthcare costs.

Aim

To review the published literature, assessing the effect of children's diet on post-tonsillectomy haemorrhage.

Methods

A systematic review of English-language articles was performed, using PubMed, in March 2016. Keywords included 'post-tonsillectomy', 'diet', 'dietary advice', 'haemorrhage', 'bleeding', 'paediatric' and 'children'.

Results

A total of 180 article abstracts were reviewed. Seven met our inclusion criteria; two were excluded as these did not discuss haemorrhage rates. Five articles were included in the final review (4 randomised studies and 1 cohort study), totalling 916 children.

Conclusions

Children's immediate diet following tonsillectomy is not associated with later haemorrhage. Later dietary restrictions are associated with increased haemorrhage rates. Parents should provide as much food as possible, of any type, after tonsillectomy.

Management of paediatric periorbital cellulitis: our experience of 243 children managed according to a standardised protocol in 2012–2015

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Introduction

Paediatric periorbital cellulitis is a common condition. Accurate assessment can be challenging, and appropriate use of computed tomography (CT) imaging is essential. We audited admissions to our unit over a four-year period, with reference to CT scanning and adherence to protocol.

Methods

A retrospective audit was conducted of paediatric patients admitted with periorbital cellulitis between 2012 and 2015.

Results

There were a total of 243 patients. Mean patient age was 4.7 years. There was a slight male predominance. The median length of admission was 2 days. Forty-eight of the 243 patients (20 per cent) underwent CT during admission; 25 (52 per cent) of these underwent surgical drainage. As per protocol, CT of the brain was performed with all orbital scans; there were no positive intracranial findings on any initial scan. Three children developed intracranial complications subsequently; all were treated with antibiotics. Our re-admission rate was 2.5 per cent.

Conclusions

Our audit demonstrates the benefit of standardising practice. The low CT rate, with the high percentage taken to the operating theatre and no missed abscesses, supports the protocol. There may be an argument to avoid routine brain CT scanning.

Endoscopic sphenopalatine artery ligation: general applicability in a teaching unit

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Background

Endoscopic sphenopalatine artery ligation is the intervention of choice for refractory epistaxis.

Aims

To assess the efficacy and outcomes of endoscopic sphenopalatine artery ligation within our teaching hospitals.

Methods

A retrospective review was conducted of all endoscopic sphenopalatine artery ligation procedures performed for epistaxis between December 2005 and December 2013.

Results

Sixty-five patients were identified, in whom 67 artery ligations were performed (63 unilateral and 2 bilateral). The overall success rate was 92.3 per cent (60 out of 65), with 5 re-bleed cases recorded within 30 days post-procedure. In 31 out of 65 cases (47.7 per cent), a consultant was the principal surgeon. The procedures for the remaining 34 out of 65 cases (52.3 per cent) were performed by trainees, with supervision ($n = 24$, 70.6 per cent) or without supervision ($n = 10$, 29.4 per cent). Sixteen patients (24.6 per cent) underwent 'clipping', 26 (40.0 per cent) had diathermy ligation, 18 (27.7 per cent) had both clipping and diathermy, and in 5 patients (7.7 per cent) the ligation technique was unrecorded. There was no correlation between epistaxis recurrence and operator grade, level of supervision, or ligation technique.

Conclusions

Endoscopic sphenopalatine artery ligation can achieve haemostasis in teams of varying grades of operators, without significant decline in outcome.

Delivery of undergraduate ENT teaching in UK medical schools

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Introduction

Papers published on undergraduate otolaryngology have shown that not all UK medical schools have a formal otolaryngology attachment, and the time dedicated to teaching in those which do is comparatively small.

Aim

To examine undergraduate otolaryngology curricula in UK medical schools.

Methods

Otolaryngology curricula were requested by email from all 32 UK medical schools. Document analysis was undertaken using both thematic and content analysis.

Results

Curricula were received from 19 medical schools. Ten main themes were identified. The results highlighted the topics taught across the UK and the number of schools that include each topic within their curriculum. Out-patient clinics and operating theatre sessions were the most commonly utilised teaching method, with logbooks noted as the most commonly used assessment technique.

Conclusions

This study highlights the large degree of variability in undergraduate otolaryngology within UK medical schools and aims to provoke thought on curriculum development.

Do ENT patients need training on the usage of intranasal corticosteroid sprays?

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Background

Studies have shown that asthma patients who are trained on inhaler use are three times more likely to use their inhalers correctly and have their asthma better controlled. Intranasal corticosteroids are recommended for the management of rhinitis, and acute and chronic rhinosinusitis with or without nasal polyps. In our experience, intranasal corticosteroid sprays are incorrectly used by patients, resulting in side effects, drug ineffectiveness, and inappropriate surgery because of the lack of symptom improvement, but to date no studies have assessed this.

Aim

To determine the experience of patients using intranasal corticosteroid sprays.

Method

A prospective questionnaire-led cohort study was conducted on patients attending with rhinological complaints who were already using intranasal corticosteroid sprays.

Results

A total of 103 questionnaires were fully completed. The mean age of the cohort was 45 years (median, 45 years; range, 18–82 years). Forty-eight patients were female (46.6 per cent) and 55 were male (53.4 per cent). The most common technique used by patients was to spray each nostril with the hand on the same side ($n = 56$), in a head up position ($n = 46$). Whilst using their intranasal corticosteroid spray, 21 patients experienced epistaxis and 22 patients had problems with nasal irritation. Thirty patients (29.1 per cent) had stopped using their intranasal corticosteroid spray by the time they attended their clinic appointment for the following reasons: problems with nasal irritation ($n = 13$), epistaxis ($n = 6$), lack of symptom improvement ($n = 9$) and symptom resolution ($n = 4$).

Conclusion

There is poor education for patients using intranasal corticosteroid sprays. Further studies are required to evaluate the effect of patient education on technique and symptom improvement.

Are ENT trainees given sufficient time to operate?

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Introduction

The European Working Time Directive has caused concern with its reduced surgical training times. It is therefore imperative for operations to be listed with appropriate times for trainees to complete them.

Aims

To assess whether tonsillectomies, septoplasties and grommet insertion were listed with appropriate times for trainees.

Methods

We audited 30 consecutive cases for each operation performed at St Johns' Hospital. Listing times were subsequently standardised prior to re-audit.

Results

There was wide variation in listing times, with insufficient time for trainees performing tonsillectomies (–5 minutes for registrars and –16 minutes for core trainees).

Standardised listing times of 60 minutes for tonsillectomies and septoplasties, and 25 minutes for grommets, were implemented. This enabled sufficient operating times for all grades when re-audited.

Conclusion

The new suggested times have enabled trainees to complete the operations within the requested time and will also save operating time which can be used for other training cases.