
**Fifty Ninth Annual Meeting
of the
Irish Otorhinolaryngology /
Head and Neck Society**

The Great Hall, Galgorm Hotel, Ballymena,
Northern Ireland
Friday 12th October & Saturday 13th October 2018

Officers

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Vice President:	Mr. N. Patil
Past President:	Mr. D. McShane
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Wilde Discoursers

1961	Terence Cawthorne	1991	David Brain
1962	Ian Simpson Hall	1992	William Panjee
1963	C.P. Wilson	1993	Tony Bull
1964	Ronald Macbeth	1994	Richard. Ramsden
1965	W.H. Struben	1995	David Kennedy
1966	Angell James	1996	L. Ryan
1967	Michel Portmann	1997	Ugo Fisch
1968	Howard House	1998	R. Goody
1969	Joseph Ogura	1999	E. McKay
1970	J.P. Hood	2000	J. Fredrickson
1971	Harold F. Schucknecht	2001	Patrick Gullane
1972	Donald F.N. Harrison	2002	William Coman
1973	Stuart Strong	2003	Thomas McDonald
1974	Douglas Bryce	2004	Trevor McGill
1975	John Ballantye	2005	Gilbert Nolst Trenite
1976	Claus Jansen	2006	George Browning
1977	Gabriel Tucker	2007	Kevin Gibbin
1978	L.B.W. Jongkees	2008	Max McCormick
1979	Robert Pracy	2009	Peter Wormald
1980	George Nager	2010	Fred Owens
1981	R.B. McDowell	2011	John Watkinson
1982	R. Wentges	2012	Richard Canter
1983	Victor Goodhill	2013	Gerard O'Donoghue
1984	Douglas Ranger	2014	Janet Wilson
1985	H. Spondalin	2015	Robin T.Cotton
1986	P. Alberti	2016	Jatin Shah
1987	Tauno Palva	2017	Valerie Lund
1988	Philip Stell		
1989	Dietrich Plester		
1990	Arnold G. Maran		

Invited Speakers

The President has chosen a paediatric emphasis for this year's meeting which is reflected in the choice of invited speakers. The Irish Otolaryngology Society is pleased to welcome Professor Blake Papsin as our 59th Wilde Discourser and Ben Hartley and Dan Tweedie for state-of-the-art updates in the world of Paediatric Otolaryngology.



We are delighted to welcome the 2018 Wilde discourser Blake Papsin from Canada, Professor in the Department of Otolaryngology at the University of Toronto and the Otolaryngologist-in-Chief at The Hospital for Sick Children where he has been a full-time Consultant since July 1996 and led the Cochlear Implant Program. Dr Papsin has published over 220 peer-reviewed journal articles, 47 book chapters and has spoken widely on the subject of surgical rehabilitation of hearing loss. Dr Papsin will also give a state-of-the-art address on auditory development and brain plasticity.



Ben Hartley is Consultant Paediatric Otolaryngologist at Great Ormond Street Hospital for Children and Honorary Senior Lecturer at University College London. He spent a year as clinical fellow in Cincinnati performing complex airway procedures under the direction of Dr Robin Cotton before starting his Consultant post in 2001. He is Director of the British Paediatric Otolaryngology Course and President of the British Association of Paediatric Otolaryngology. He will present his lecture on management of vascular anomalies in children and join a panel discussion on common paediatric ENT conditions.



Dan Tweedie is a Council Member of the British Association for Paediatric Otorhinolaryngology (BAPO) and is also a member of the Children's Surgical Forum at the Royal College of Surgeons, England. He was appointed Children's ENT Consultant at Guy's and St Thomas' Hospital NHS Foundation Trust, London, in January 2013. One of his research passions is Coblation intracapsular tonsillectomy (tonsillotomy), which he advocates as a gentle alternative to conventional tonsil surgery. Dan will present his prospective study of 1000 total intracapsular tonsillectomy procedures in children and join a panel discussion on common paediatric ENT conditions.

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Program

Thursday 11th October

1600 - 1900	Registration	<i>Entrance Hall, Hotel</i>
1830 - 1920	IOS Council Meeting	<i>Titanic Room, Hotel</i>
1930 for 2000	President's Dinner (by invitation only)	<i>Meet in Conservatory followed by dinner in The River Room, Hotel</i>

Friday 12th October

0730 - 0850	Registration
0850 - 0900	Welcome by Ms. Cate Scally (President) / Announcements

0900 – 1100 HEAD & NECK CHAIRPERSONS:

**BARRY DEVLIN, BELFAST
NEVILLE SHINE, DUBLIN**

0900 - 1030	Free Paper Session 1 – Head and Neck
0900 – 0908	OUTCOMES IN MERKEL CELL CARCINOMA OF THE HEAD & NECK M Adams, S Sinclair
0908 – 0916	PHARYNGEAL POUCH SURGERY: A SINGLE SURGEON'S EXPERIENCE OVER 20 YEARS I O’Riordan, E Keane, C Timon
0916 – 0924	OUR EXPERIENCE OF INTRALESIONAL CIDOFOVIR INJECTIONS FOR RECURRENT RESPIRATORY PAPILLOMATOSIS Farrell, A Gyan-Baffour, B Speaker, A Alamanasraa and M Rafferty

- 0924 – 0932 REDUCING THE RATE OF FISTULA: DOES FIBRIN SEALANT AS AN ADJUNCT IN PHARYNGEAL CLOSURE HELP? A TWO-CENTRE EXPERIENCE
Roplekar Bance R, Jabin T, Coyle P, Shah K, Kothari P, Dias A, Vaz F
- 0932 – 0940 POST-TRANSPLANT HEAD & NECK CANCER IN SOLID ORGAN TRANSPLANT RECIPIENTS – MULTI-CENTRE ANALYSIS IN CONJUNCTION WITH THE NATIONAL CANCER REGISTRY OF IRELAND
C Fitzgerald, D Sexton, E O’Leary, S Deady, JJ Egan, D Houlihan, A McCormick, FJ Maloney, P Conlon, JP O’Neill
- 0940 – 0948 NARROW BAND IMAGING - A PROSPECTIVE STUDY ON A NOVEL CLINICAL PROCEDURE IN THE MANAGEMENT OF HEAD AND NECK CANCERS
Alanna Quinn, Gerard Thong, Darragh Coakley, Gerard O’Leary, Peter O’Sullivan and Patrick Sheehan
- 0948 – 0956 OBSTRUCTING THYROID THROUGH THE AGES – FROM CRADLE TO THE GRAVE
JM Hintze, P Walshe
- 0956 - 1004 RADIOLOGICAL ASSESSMENT OF AIRWAY DIMENSIONS PRIOR TO TRACHEOSTOMY TUBE INSERTION
MC Corbett Mel, IH Hughes Isobel, JOS O’Shea John, JS Savage Jane, FW Wallis Fintan.
- 1004 – 1012 THE VALUE OF PREOPERATIVE IMAGING AND DISEASE LOCALIZATION IN PARATHYROID SURGERY
G. O’Flanagan, E. Keane, L. Mc Loughlin, B. Lang, C. Timon
- 1012 – 1020 EXTENDING HPV VACCINATION TO BOYS IN THE REPUBLIC OF IRELAND
C Fitzgerald, P Sheehan, H Rowley, N Shine, L Skinner, T Moran, S Ryan, O Young, P Lennon, JP O’Neill
- 1030 - 1100 CME #1 – Head & Neck - Consultant case discussions**
Mr B Devlin, Belfast
Mr M. Black, Belfast
Mr N. Shine, Dublin
- 1100 - 1130 Coffee Break with Exhibitors**

1130 – 1305 RHINOLOGY CHAIRPERSONS:

BRENDAN HANNA, BELFAST
BRENDAN FENNESSY, DUBLIN

- 1130 - 1200** **CME #2 - Panel discussion on Rhinorrhoea and surgery for OSAS**
Peter Leyden, Craigavon
Neil McCluney, Londonderry
Peter Lacy, Dublin
Mohammed Amin, Dublin
- 1200 - 1305** **Free Paper Session 2 – Rhinology**
- 1200 – 1208 STANDARDISING THE APPROPRIATE PRESCRIBING OF
ANTICOAGULANTS IN PATIENTS ADMITTED WITH
EPISTAXIS: A LOCAL CHANGE IN GUIDANCE
G Donaldson, A Gomati, KW Ah-See, H Watson, S Stone
- 1208 – 1216 THE DIAGNOSTIC ACCURACY OF THE LUND-MACKAY
STAGING SYSTEM FOR CHRONIC SINUSITIS IN RELATION
TO THE ETHMOID SINUSES
Ronan Fahy, Naishadh Patil
- 1216 – 1224 LOW DOSE BEVACIZUMAB THERAPY FOR EPISTAXIS IN
HHT: EARLY NORTHERN IRELAND EXPERIENCE
C McKenna, G Gray, B Hanna
- 1224 – 1232 A RETROSPECTIVE 15 YEAR REVIEW OF A SINGLE CENTRE
HEAD AND NECK UNIT'S EXPERIENCE OF MAXILLECTOMY
SURGERY FOR CANCER
P Coyle, D McAnerney, R Roplekar, K Chiu, A Camilleri, C Chan,
A Dias, P Kothari
- 1232 – 1240 BALLOON SINUPLASTY UTILIZATION IN THE PEDIATRIC
POPULATION: A NATIONAL DATABASE PERSPECTIVE
GT Gerard Thong, ND, Natasha Dombrowski, KK Kosuke Kawai,
EA Eelam Adil
- 1240 – 1248 THE USE OF IMAGE GUIDED SINUS SURGERY IN A DISTRICT
GENERAL HOSPITAL
DM David McCrory, RS Robbie Stewart, CL Colin Leonard,
TF Turlough Farnan, PL Peter Leyden
- 1248 – 1256 SURGICAL MANAGEMENT OF INTRACTABLE EPISTAXIS: A
COMPARATIVE RETROSPECTIVE STUDY OF 121 CASES
GT Gerard Thong, AQ Alanna Quinn, GOL Gerard O' Leary,
POS Peter O' Sullivan, PS Patrick Sheahan.

1256 – 1304	NASAL TRAUMA: A RETROSPECTIVE ANALYSIS OF CONSERVATIVE MANAGEMENT N, HOPE; K, YOUNG; K, MCLAUGHLIN; C, SMYTH
1300 - 1400	Lunch with exhibitors <i>Great Hall, Bar – Lounge, William Young</i>
1400 - 1415	AGM

1415-1700 OTOLOGY CHAIRPERSONS:

NEIL BAILIE, BELFAST
PETER GORMLEY, GALWAY

1415 - 1520	Free Paper Session 3 - Otology
1416 – 1424	A MULTICENTRE REVIEW OF BONALIVE UTILISATION IN NORTHERN IRELAND Colin G Leonard, Sinead McNally, Mark Adams, Ekambar Reddy, Neil Bailie
1424 – 1432	A PARADIGM SHIFT IN ADULT COCHLEAR IMPLANT CRITERIA? N. Elsafty, J. Smith, CS. Franklin, P.Walsh, F. Glynn, L. Viani
1432 – 1440	DECONSTRUCTING MICROSUCTION: HIERARCHIAL TASK ANALYSIS AN EDUCATIONAL TOOL FOR Isobel O'Riordan, CC Camilla Carroll
1440 – 1448	SURFERS EAR IS NOT JUST FOR SURFERS! S Boyle, A Moriarty, M Choo, M Bresnihan, N Considine, H Khan, N Patil
1448 – 1456	IS BILATERAL ALWAYS BETTER? THE BELFAST PATHWAY FOR COMPLEX NEEDS CHILDREN Colin Leonard, Fearghal Toner, Catherine Smyth, Joseph G Toner.
1456 – 1504	STEREOTACTIC RADIOSURGERY IN THE PRIMARY MANAGEMENT OF VESTIBULAR SCHWANOMMA AND RESIDUAL DISEASE FOLLOWING MICROSURGERY N Elsafty, C Fitzgerald, S Hogan, D Rawluk, M Javadpour, R McConn-Walsh
1504 – 1512	TRIGEMINAL AND SENSORY NERVE STIMULATION DRIVES EXTENSIVE BRAIN PLASTICITY: NEW OPPORTUNITIES FOR TINNITUS TREATMENT Hubert H. Lim Craig D. Markovitz Cory D. Gloeckner

1512 – 1520 SAFETY AND EFFICACY OF A NEW BIMODAL SENSORY NEUROMODULATION TREATMENT FOR TINNITUS EVALUATED THROUGH A RANDOMIZED CLINICAL TRIAL IN 326 PATIENTS
T.Subramaniam, D. Hall, S. Vanneste, B. Langguth, B.Conlon

1530 - 1600 Coffee Break (Poster Presentations and adjudication)
Judges – Mr. Gerry O’Leary and Mr. Robin Adair

1600 - 1630 CME #3 – Recent advances in vestibular testing.
vHIT demonstration
Mr N Bailie, Belfast
Mr P Gormley, Galway

1630 – 1700 CME #4 – Controversies in auditory implantation – ask the experts.
Mr F Glynn, Dublin.
Professor B Papsin, Toronto,
Mr J. Toner, Belfast,
Professor Laura Viani, Dublin,

1830 - 1915 Drinks Reception *the Bar Lounge, The Great Hall*

1930 – 2030 WILDE DISCOURSE: PROFESSOR BLAKE PAPSIN, TORONTO

1925 – 1930 Introduction by the President

1930 - 2015 The Wilde Discourse *The Great Hall*

Followed by: Gala Dinner (Black Tie) / President’s speech / prizes

- 0956 – 1004 AN UPDATE OF THE IMPACT OF UNIVERSAL NEWBORN HEARING SCREENING (UNHS) ON COCHLEAR IMPLANTED CHILDREN IN IRELAND
L. Geyer, M.M. Gabriel, C. McHugh, C. Simoes-Franklin, J. Thapa, F. Glynn, P. Walshe, L. Viani
- 1010 – 1030 CME #5 - Intracapsular Tonsillectomy**
Dan Tweedie, London
- 1030 – 1100 CME #6 - Management of Vascular Anomalies in children**
Ben Hartley, London
- 1100 - 1130 Coffee Break with exhibitors**
- 1130 - 1215 CME #7 – State of the Art – How the Brain gets Language: Perceiving information**
Professor Blake Papsin. Toronto
- 1215 – 1300 CME #8 – Paediatric ENT case discussions**
Ben Hartley, GOSH, London
Rania Mehanna, OLCHC, Dublin
Ms. Eimear Phelan, Mater, Dublin
Dan Tweedie, Evelina London Children's
- 1310 - 1320 Closing Speeches / Best Paper / Poster Prizes**
Poster Judges – Mr. Gerry O’Leary and Mr. Robin Adair
Oral presentation judges – Prof. McConn-Walsh, Ms. Cathy Smyth

1330 - 1430 IOTA SESSION CHAIRPERSONS:

HELENA ROWLEY, DUBLIN
MYLES BLACK, BELFAST

- 1330 - 1430 IOTA Session** *The Drawing Room, Hotel*
(Lunch for 20 provided)
- Tips and Tricks session on ISCP and MSF update
Helen Harty PhD, RCSI consultant for ISCP
- GDPR: effects on research for SpRs
Mr Seamus Boyle, Sligo
- Health Service restrictions on elective surgery in ENT
Mr Myles Black, TPD N. Ireland
- Q&A session with TPDs

Abstracts

Free Paper Session 1 – Head and Neck

OUTCOMES IN MERKEL CELL CARCINOMA OF THE HEAD & NECK

Objective

Merkel cell carcinoma (MCC) is a rare neuroendocrine cutaneous malignancy which often presents in the head & neck region. This paper compares oncological outcomes of lesions presenting in the head and neck with those in the limbs.

Methods

Retrospective case series.

Results

Between 2011 and 2016 N=44 cases of MCC were diagnosed in Northern Ireland. In 27/44 (61%) of cases involved primary tumours of the head & neck. In 17/44 (39%) of cases the primary site was the upper or lower limbs. Head & neck primary site was associated with poorer overall (24% vs 62%, $p = 0.83$) and disease specific (33% vs 81%, $p=0.29$) 5-year survival despite a trend towards lower T-stage and overall AJCC stage in the head & neck group.

Conclusion

MCC presenting in the head & neck is associated with poorer overall and disease specific 5-year survival.

PHARYNGEAL POUCH SURGERY: A SINGLE SURGEON'S EXPERIENCE OVER 20 YEARS

Objective

Pharyngeal pouch surgery has undergone a gradual shift from open surgery to minimally invasive endoscopic techniques. This has been reflected in the advancement of endoscopic stapling devices, making minimally invasive diverticulotomy the treatment of choice. Historically, open surgery has been associated with greater morbidity, longer operating times and similar outcomes to endoscopic approaches.

Methods

We carried out a retrospective review of a single surgeon's experience of pharyngeal pouch surgery in multiple centres. We collected data on patient demographics, use of stapling devices, surgical technique and incidence of complications. The aim was to compare our practice to international data, to identify common issues in recurrent cases, and to assess which patient demographics appear to be benefiting from surgical intervention.

Results

We reviewed data on 80 procedures for pharyngeal pouches performed between 1997- 2018. The average age was 71 years. Male to female ratio was 1.4:1.

72 cases were performed by endoscopic stapling, 6 were open procedures, 2 of which required a myotomy. 15 cases were revision surgery following previous open or endoscopic procedures.

There was 1 reported perforation and 1 patient found to have a malignancy within the diverticulum.

Conclusion

Our results over a 20-year period are consistent with international data describing rates of complications, recurrence and the rare incidence of malignancy. Review of interventions, complication rates and procedure success inform ongoing management choices in this potentially complex surgical issue.

OUR EXPERIENCE OF INTRALESIONAL CIDOFOVIR INJECTIONS FOR RECURRENT RESPIRATORY PAPILOMATOSIS

Objective

Recurrent Respiratory Papillomatosis (RRP) can be a challenging condition to manage. It can have a major impact on airway and voice. The use of cidofovir intralesional injections has shown promise for those affected by papillomatosis of the upper airway. We performed a retrospective review of our experience of intralesional cidofovir injections for papillomatosis over a 5-year period.

Methods

We conducted a retrospective chart review of patients who had undergone cidofovir injections during the time period 2013-2017. Charts were reviewed to determine number of procedures performed, procedures required to improve voice, cost and time to recurrence/need for further interventions. We also recorded adverse outcomes. All patients who underwent cidofovir injections for papillomatosis were included in our review.

Results

Over a 5-year period, 65 cidofovir injections for papillomatosis were performed. Of these 65, all met inclusion criteria and were included in the review. In total 18 patients underwent 100 procedures. The mean number of procedures per patient was 8, range 2-14. The number of adverse outcomes experienced by patients as a result of injections was 0.

Conclusion

In our experience the use of intralesional cidofovir injections demonstrate good effect in reducing the burden of dysphonia on patients suffering from papillomatosis, with only a small number of injections required for patients to experience an improvement. The high cost of the treatment as well as concerns surrounding long term side effects should be considered prior to embarking on this treatment.

REDUCING THE RATE OF FISTULA: DOES FIBRIN SEALANT AS AN ADJUNCT IN PHARYNGEAL CLOSURE HELP? A TWO-CENTRE EXPERIENCE

Objective

Pharyngocutaneous fistula is a recognised complication of laryngectomy. The use of tissue flaps (e.g. pectorals major flap) can improve pharyngeal closure, especially in compromised tissue (e.g. post radiotherapy). Additionally, recently, synthetic materials such as fibrin sealant have been used to close pharyngocutaneous fistulas as a secondary measure. The objective of this work is to assess fibrin sealant use at primary closure.

Method

A retrospective review of all cases from two periods in two centres was completed. All cases were led by a single surgeon, standardised as per their technique. Tisseel © was used as an adjunct to primary closure in 34 patients in the first period, and 16 in the second.

Results

In the first series of 34 cases, 3 developed pharyngocutaneous fistula. All were salvage cases. The fistula rate was 9% (3/34). All 3 were post radiation cases. In the second series, 1/16 developed a fistula, indicating a slightly lower but comparable fistula rate of 6.25%. The fistula was also a salvage case.

Conclusion

The incidence of pharyngocutaneous fistula is quoted as 14% in primary laryngectomies, 22% in post irradiated laryngectomies and 34 % in patients who have undergone chemoradiotherapy. Fibrin sealant has been used more recently to close fistula tract complications. However, no studies to our knowledge have been published with fibrin sealant used as an adjunct in primary closure. This study represents the first such series of patients with excellent results. Further studies may provide evidence to further establish the use of fibrin sealant at primary closure.

POST-TRANSPLANT HEAD & NECK CANCER IN SOLID ORGAN TRANSPLANT RECIPIENTS – MULTI-CENTRE ANALYSIS IN CONJUNCTION WITH THE NATIONAL CANCER REGISTRY OF IRELAND

Objective

Solid organ transplant recipients are at a heightened risk of cancer compared to the general population relating to immunosuppressive burden and environmental risk factors. To date, the national oncological impact following solid organ transplantation in the Republic of Ireland has not been investigated. We conducted a national registry study of cancer incidence following solid organ transplantation.

Methods

National centres for solid organ transplantation supplied the National Cancer Registry of Ireland (NCRI) with transplant registry databases to identify episodes of malignancy from 1994-2014. Standardised incidence of cancer post-transplant was calculated in comparison to the general population expressed as standardised incidence ratios (SIRs). Cancer incidence comparisons between solid organ transplant type were assessed by incidence rate ratios.

Results

A total of 4,300 solid organ transplant recipients were reviewed in this national study. Kidney transplant recipients constituted the majority of transplant recipients (75.97%) followed by liver (13.34%), heart (6.16%) and lung (4.51%). The most common cancers included non-melanoma cutaneous squamous cell carcinoma (SIR 25.17), basal cell carcinoma (7.82), skin carcinoma-in-situ (10.84), non-Hodgkin lymphoma (6.96), and renal cell carcinoma (4.26). By topographic grouping, cancers within the head and neck region had the highest incidence with an SIR of 8.71. Cancer incidence was higher in all recipient groups compared to the general population.

Conclusion

This study reports the incidence of head and neck cancer following solid organ transplantation in Ireland and is the largest series of its kind. These results have significant policy implications for surveillance and early oncological intervention in this patient group.

NARROW BAND IMAGING - A PROSPECTIVE STUDY ON A NOVEL CLINICAL PROCEDURE IN THE MANAGEMENT OF HEAD AND NECK CANCERS

Objective

Narrow band imaging (NBI) is a new modality that has been proposed to improve diagnostic accuracy of Head and neck cancer (HANC). NBI is an optical image enhancement technology that is used to assess the vascular pattern of concerning lesions. The aim of this study is to ascertain the role NBI plays in the clinical diagnosis and surveillance of HANC patients, and whether it influences our management thereafter.

Methods

A prospective analysis of a consecutive cohort of patients was undertaken in the HANC clinic over a period of two months. All patients underwent NBI as part of their clinical examination. We recorded examinations as being normal, indeterminate or abnormal for white light (WL) and also for NBI. We captured video footage and clinical photographs of each patient. Full ethical approval was obtained from the local ethics board.

Results

40 patients were enrolled in our study, 21 new referrals and 19 undergoing surveillance from previous tumours. Each patient underwent examination of the upper aero-digestive tract under WL and NBI. We observed that 12.5% of patients had indeterminate appearances on NBI with 12.5% considered abnormal. NBI altered the management of 7.5% of patients by raising the index of suspicion resulting in more aggressive investigation.

Conclusion

Patients with head and neck cancer require follow up which is long-term and labour intensive. NBI is a novel technology which has the potential to target resource utilization to those patients at highest risk.

OBSTRUCTING THYROID THROUGH THE AGES – FROM CRADLE TO THE GRAVE

Objective

Thyroid enlargement can obstruct adjacent structures and lead to multiple phenomena, including dysphagia, dyspnoea, stridor and rarely cardiac arrhythmia. Management of these obstructive phenomena differs greatly depending on the age of the patient.

Methods

In this series we describe thyroid obstruction from pregnancy through infancy, childhood, adolescence, and old age.

Results

In the very young we demonstrate that in the absence of malignancy conservative management is far preferable than surgery whereas with increasing age the opposite is true. We also show that in the

presence of compressive multinodular goitre conservative surgery can lead to potentially dangerous problems later in life.

Where surgery is required in such cases prolonged periods of observation can lead to potentially life-threatening scenarios, such as cardiac compromise.

Conclusion

Thyroid disease can lead to multiple compressive manifestations. It is important to consider age of the patient when deciding management. In the young, treatment with levothyroxine can reduce compressive symptoms and avoid surgery; in the elderly, early surgical intervention should be considered.

RADIOLOGICAL ASSESSMENT OF AIRWAY DIMENSIONS PRIOR TO TRACHEOSTOMY TUBE INSERTION

Objective

Tracheostomies are commonly performed in patients requiring prolonged ventilatory support. Insertion of inappropriately sized tracheostomy tubes confer a risk of decannulation, tissue damage, ventilatory difficulties, premature change and discomfort. Radiological assessment prior to procedure could aid clinical judgement in determining correct size.

Methods

The CT scans and chest radiographs of all patients admitted to our ICU who received tracheostomies over one year were reviewed. Measurements of the airway at various points were taken and scaled to the known internal diameter of the endotracheal tube on the x-ray. Linear regression analysis was conducted and a four-point scoring system was developed to identify patients needing a non-standard sized tracheostomy.

Results

20 cases were reviewed. Appropriate tracheostomy size correlates with tracheal diameter at the endotracheal tube tip ($R^2=0.135$), the carina ($R^2=0.128$), the midpoint of larynx to carina ($R^2=0.146$), bronchial diameter at the left mainstem ($R^2=0.323$), and tracheal length (0.23). Among our cohort a score of 4 predicts the need for a larger tracheostomy tube (sensitivity = 1, specificity = 0.88).

Conclusion

All of our patients had chest radiographs while intubated easily accessible, as would be standard in most centres. Our score is an easy to apply stratification system that may aid clinicians in sizing tracheostomy tubes, potentially reducing the risks associated with inappropriate sizing. A radiopaque measurable marker has been introduced to facilitate easy prospective chest x ray analysis. A larger prospective cohort study is required to further evaluate the scoring system.

THE VALUE OF PREOPERATIVE IMAGING AND DISEASE LOCALIZATION IN PARATHYROID SURGERY

Objective

Otolaryngologists are performing increasing numbers of parathyroid surgeries. Our aim was to assess the correlation of preoperative imaging with intraoperative findings in primary hyperparathyroidism (pHPT), and determine the benefits of preoperative localization.

Methods

This was a retrospective review of all patients who underwent parathyroid surgery performed by a single surgeon across multiple institutions over 20 months. Routine preoperative ultrasound and sestamibi were performed, while selective cases underwent CT or MRI. We assessed the correlation of radiological findings with incision size and operative duration.

Results

Our study included 75 patients (60 female, 15 male). Mean age was 60 years. Sixty-six patients underwent both ultrasound and sestamibi. Disease was correctly lateralized in both scans in 23 cases (34.5%), did not lateralize in 34 (51.5%), and imaging was discordant in nine (13.6%). When both scans were positive, mean duration of surgery was 31 minutes, compared with 60 minutes if scans failed to localize disease ($p=0.001$). Positive imaging was also significantly associated with a smaller average incision (2.7cm vs 3.4cm, $p=0.001$). Most patients with pHPT (89%) had a single adenoma.

Conclusion

The accuracy of imaging in localizing parathyroid adenomas was lower than internationally reported, possibly related to variation in reporting across multiple institutions. Surgeons should interpret imaging with caution, and may expect concordance of imaging with intraoperative findings in line with our results. Positive imaging is associated with reduced operative time and smaller incision. The majority of patients with negative imaging had a single adenoma intraoperatively. Adjuncts such as 4D-CT and IOPTH may benefit this cohort, however, feasibility in all patients is limited due to availability, associated cost, and radiation dose.

EXTENDING HPV VACCINATION TO BOYS IN THE REPUBLIC OF IRELAND

Objective

Human papilloma virus (HPV) vaccination represents a safe and effective method of preventing HPV-related diseases. At present, however, only females are included in the HPV vaccination programme in the Republic of Ireland. In this study, we review current rates of oropharyngeal squamous cell carcinoma (OPSCC), as part of the Health Information & Quality Authority (HIQA) review to assess the case for extending the HPV vaccination to boys in the Republic of Ireland.

Methods

The National Cancer Registry of Ireland (NCRI) database 2014-2018 was reviewed to assess rates of OPSCC in eight cancer hospitals within the Republic of Ireland. Findings are compared to a similar review conducted by the NCRI from 2009-2013.

Results

A total of 728 OPSCC cases were identified across eight cancer centres. The total number of HPV-positive OPSCC was 338 (46%), with male patients accounting for 262 (77.5%) in this group. In total, p16 status was not recorded in 138 cases of OPSCC (19%). A 37% increase in reported OPSCC cases is seen from 2009-2013, with HPV-positive cases accounting for almost 50% of this increase.

Conclusion

A significant increase in reported rates of OPSCC is noted, particularly in males. The findings described support the inclusion of boys in the HPV vaccination programme and have been included in a recent HIQA report on this topic. We also highlight the need for p16 status to be reported in all cases where OPSCC diagnosis is made to allow contemporary staging and treatment planning.

Free Paper Session 2 – Rhinology

STANDARDISING THE APPROPRIATE PRESCRIBING OF ANTICOAGULANTS IN PATIENTS ADMITTED WITH EPISTAXIS: A LOCAL CHANGE IN GUIDANCE

Objective

National data has highlighted a wide variation in management of inpatient epistaxis. There is a recognised lack of high-level evidence guiding the use of oral anticoagulants especially Direct Oral Anticoagulants (DOACs). Recent studies have shown that DOACs now surpass warfarin as the drug of choice in atrial fibrillation. We implemented a new locally accepted algorithm for managing epistaxis inpatients on any form of anticoagulation.

Methods

A specific algorithm was designed with agreement from local ENT, Haematology and Cardiology departments. A prospective closed loop audit was performed during separate three-month periods, with data collected relating to the appropriate prescription of anticoagulants.

Results

A total of 82 (47:35) patients were analysed between both cycles. There were similar rates of anticoagulant use (72% v 66%). In both groups, use of DOACs was greater than warfarin (42% v 24%). Anticoagulant use was associated with a longer hospital stay.

The appropriate prescription of anticoagulants improved from 56% to 87% following the implementation of this novel algorithm. Beforehand, DOACs were held inappropriately in 11/13 cases but were appropriately continued in 100% in period two. Appropriate prescription of warfarin improved from 90% to 100%. Overall, anti-platelets were the most likely to be continued (73%) with DOACs most likely to be held (74%). Re-admission rate was 8.5%, with rates highest amongst those taking Rivaroxaban & aspirin.

Conclusion

We demonstrated a significant improvement in the appropriate prescription of oral anticoagulants following the implementation of a novel local guideline. We also highlighted a continuing trend of increasing use of DOACs.

THE DIAGNOSTIC ACCURACY OF THE LUND-MACKAY STAGING SYSTEM FOR CHRONIC SINUSITIS IN RELATION TO THE ETHMOID SINUSES

Objective

The Lund-Mackay staging system is a widely used method for radiologic staging of chronic rhinosinusitis. The aim of this study was to investigate the diagnostic accuracy of the Lund-Mackay staging system in relation to the ethmoid sinuses alone and how it correlates to disease severity in patients with chronic rhinosinusitis without nasal polyps (CRSsNP).

Methods

A cross-sectional study was conducted using consecutive sampling. The CT sinuses of 100 patients with CRSsNP were analysed and a Lund-Mackay score was applied to their ethmoid sinuses. The CT brain of 100 patients with no symptoms of sinusitis(control) were analysed and a score applied. Disease severity was measured by the requirement of surgical treatment. Statistical analysis was carried out using SPSS 24(t-test).

Results

In the CRSsNP group, the mean Lund-Mackay score was 1.6. For the control, the mean Lund-Mackay score was 0.7. Selecting a Lund-Mackay score cut off value of 1 or greater as abnormal, the sensitivity and specificity were 57% and 74%, respectively. Of 29 patients with CRSsNP, only 3 required surgery. The mean score for those who received surgery was 0.33 and the mean for those who did not was 1.19. The p-value was 0.108(95% confidence interval= -1.959, 0.241), showing no correlation between the need for surgery and higher Lund-Mackay scores.

Conclusion

Lund-Mackay score of the ethmoid sinuses revealed a low sensitivity and specificity. This indicates a high level of incidental findings in non-symptomatic patients, necessitating a better scoring system. CRSsNP disease severity did not correlate with a higher Lund-Mackay score.

LOW DOSE BEVACIZUMAB THERAPY FOR EPISTAXIS IN HHT: EARLY NORTHERN IRELAND EXPERIENCE

Objective

The monoclonal antibody bevacizumab (Avastin®) has emerged as a systemic therapy for HHT patients with significant chronic blood loss. It is a monoclonal antibody which inhibits vascular endothelial growth factor (VEGF). Varying dosage regimens good results have been reported from countries outside Ireland. Research results, however, may not always translate into effective treatments in other populations; the life-threatening dermatitis that occurred in the fair skinned Irish and Scottish populations when the monoclonal antibody cetuximab was introduced being one such example. We therefore report on the early results of instituting a low dose protocol of Bevacizumab therapy for HHT in Northern Ireland.

Methods

Bevacizumab was given as six infusions of 0.125mg/kg every 2 weeks in a 39-year-old female with HHT. Epistaxis severity score (ESS), SNOT 20 and SF 36 scores were collected before and after bevacizumab treatment at 3 months and 6 months.

Results

Treatment was well tolerated with no blood pressure elevation or other significant side effects. ESS dropped from 9.02 to 2.43 at 3 months and 2.83 at 6 months. SNOT 20 score dropped from 69 to 11 to 8. SF 36 showed dramatic improvement in health-related quality of life following treatment.

Conclusion

There is no dedicated HHT service in Northern Ireland and patients tend to present to multiple specialties including gastroenterology, cardiology and ENT. We have demonstrated the feasibility, efficacy and low morbidity of low dose bevacizumab for problematic epistaxis in our local population.

A RETROSPECTIVE 15 YEAR REVIEW OF A SINGLE CENTRE HEAD AND NECK UNIT'S EXPERIENCE OF MAXILLECTOMY SURGERY FOR CANCER

Objective

Maxillectomies can be used for surgical excision of cancers in the maxilla, nose and palate. Surgery is life changing, both affecting our patient's ability to eat and facial cosmesis. We reviewed our unit's experience of patients who have had maxillectomy surgery for cancer over the last 15 years.

Method

Retrospectively patient notes both in electronic and paper format were reviewed. A literature search and advice from Maxillofacial, ENT and Oncology members of the Multidisciplinary Team allowed for creation of a proforma of data to collect.

Results

57 patient's notes were reviewed, 33 were male and 24 females. The most common age of diagnosis was 60-69 years old. 43 (75%) had stage 4 cancer at presentation. Squamous cell carcinoma (SCC) was the most common histological diagnosis. 28 patients had neck dissections, 11 had positive neck nodes. However, 18 T4N0 patients did not have neck dissections. New evidence^(1,2) shows improved survival with elective neck dissections. Our team will continue to develop and keep up to date. Reconstruction was managed by obturators in 31 patients, the rest underwent flaps, the most common was a radial forearm flap, 9. Our 5-year survival rate for SCC was 38.5%.

Conclusion

Retrospective studies are important in reviewing current work performed in a unit. These cancers are rare but our caseload was as expected. Our review has shown that we are providing a better reconstructive service to our patients over the latter five years of the study, but obturators are still a valid management option.

BALLOON SINUPLASTY UTILIZATION IN THE PEDIATRIC POPULATION: A NATIONAL DATABASE PERSPECTIVE

Objective

Balloon sinuplasty (BS) is a surgical management option in the treatment of chronic rhinosinusitis (CRS) in the paediatric population. The purpose of this study is to examine BS utilization in children and adolescents in the United States using a large administrative database.

Methods

A retrospective cohort study of children 18 years of age or younger who underwent BS or endoscopic sinus surgery (ESS) using traditional instrumentation, five years before and after the introduction of the BS billing codes was conducted using the Paediatric Health Information System (PHIS) database.

Results

A total of 14,079 patients met inclusion criteria. There was no significant increase in BS rates between 2011 and 2016. BS was more commonly performed on younger children than traditional ESS ($p < 0.001$). There were 23 (4.4%) readmissions within 30 days in the balloon cohort versus 3.5% in the traditional ESS cohort. Median cost of balloon maxillary antrostomy (US\$ 6560; IQR: 5420 to 8250) was higher than the median cost of traditional maxillary antrostomy (US\$ 5630; IQR:

4130 to 7700; $p < 0.001$). Physicians who performed BS also performed a larger volume of ESS procedures overall.

Conclusion

Rates of balloon sinuplasty performance in the paediatric population have not increased over time. Surprisingly, BS is performed comparatively more commonly in younger children. There was no difference in readmission rates between BS and traditional ESS, and the median cost of balloon maxillary antrostomy was higher than that of traditional maxillary antrostomy. This data suggests the role of BS in the paediatric CRS population remains unclear.

THE USE OF IMAGE GUIDED SINUS SURGERY IN A DISTRICT GENERAL HOSPITAL

Introduction

Image guided surgery (IGS) allows for the comparison of intraoperative anatomy, with preoperative imaging information showing the precise location of a surgical instruments. It is particularly useful in endoscopic sinus surgery involving extensive disease, revision cases or cases involving distorted anatomy to help minimise the risk of complications. We aimed to analyse the prevalence and indications for IGS in a district general hospital (DGH).

Methods

This is a retrospective study of all patients who underwent sinus surgery in a DGH over a 5-year period using the theatre management system. Individual analysis of outpatient clinic letters and operation notes allowed us to identify the patients that had undergone IGS. We interviewed consultant rhinologists within the department to assess their “criteria” for electing to use imaging guidance.

Results

We identified 30 cases (10%) that utilised IGS out of 317 over a 5-year period. Indications for using IGS included; extensive frontal sinus disease (16/30), revision surgery (8/30) and extensive polyposis (6/30).

Conclusion

IGS allows for complex procedures to be performed efficiently, effectively and safely in a DGH. It serves as an adjunct not a substitute for thorough surgical training, knowledge of anatomy or sound intra operative decision making. Cases should be selected carefully there is an increased set up time and consumable cost.

SURGICAL MANAGEMENT OF INTRACTABLE EPISTAXIS: A COMPARATIVE RETROSPECTIVE STUDY OF 121 CASES

Objective

Epistaxis is the most prevalent ENT emergency and when intractable requires operative intervention, including sphenopalatine artery ligation, anterior ethmoid artery ligation, septoplasty, and EUA with operative packing. Our objective was to study the factors contributing to success vs failure of these procedures at a major teaching hospital.

Methods

We performed a retrospective chart review of all patients undergoing operative intervention for epistaxis in an emergent setting from Oct 2008 to July 2018. We compared both patient and surgical factors, focusing on those patients who required more than one operative intervention. Outcomes measured included need for second operative intervention or further nasal packing, days to discharge and overall length of admission.

Results

During the study period, 121 patients underwent operative intervention for intractable epistaxis and were included in our study. Epistaxis was controlled in 79% of patients. 21% of patients had further epistaxis requiring further operative intervention (n=15) or nasal packing(n=11). The most common contributory factor to failure was concomitant anticoagulant therapy. Surgical approach, seniority of operating surgeon, surgical technique, and clipping vs diathermy of sphenopalatine artery were found not to be significant factors.

Conclusion

Intractable epistaxis represents a considerable proportion of the Otorhinolaryngologist's emergency workload. Our study showed that concomitant anticoagulation therapy was a risk factor for second surgical procedure or nasal packing.

NASAL TRAUMA: A RETROSPECTIVE ANALYSIS OF CONSERVATIVE MANAGEMENT

Objective

Nasal injuries are a common presenting complaint. Assessment often takes place a week after injury to allow oedema over the dorsum of the nose to settle, aiding more accurate evaluation. In our institution, little is known what happens to those patients not undergoing nasal bone manipulation following assessment. The aim of this work was therefore to assess documentation and clinical findings of patients undergoing conservative management of nasal injuries, and the extent to which they sought healthcare intervention at a later date.

Methods

Retrospective data was collected over 24 consecutive months for patients undergoing conservative management following nasal injury. Demographic data and mechanism of injury were collected. Clinical documentation of patient symptoms and findings were recorded. Further appointments in ENT for nasal symptoms were noted.

Results

A total of 231 case notes were reviewed. The average age of patient undergoing assessment was 29. 138 patients were male (60%). The most common modes of injury were: fall (36%), assault (26%) and sports (15%). The average time from injury to assessment was 10.6 days (range 1-90). 220 patients were seen by FY2 and CT doctors. 19 patients (8%) were later referred for nasal symptoms, of which 7 have been offered septoplasty or septorhinoplasty.

Conclusion

Following assessment for nasal injury, a not insignificant number of patients later require evaluation for nasal symptoms. Further work comparing this cohort to those undergoing nasal manipulations is required to better understand the implications for early nasal manipulation.

Free Paper Session 3 - Otology

A MULTICENTRE REVIEW OF BONALIVE UTILISATION IN NORTHERN IRELAND

Objective

1. Assess the efficacy and safety of Mastoid Obliteration with S53P4BAG Bioactive Glass (BonAlive)
2. Assessment of efficacy by Otoscopy at post operatively. Efficacy was assessed by presence of recidivism, infection control and audiometric performance.
3. Assessment of safety by case note review for intra and extra-temporal complications arising as a result of surgery

Methods

Retrospective case note review performed at Craigavon Area Hospital and The Royal Victoria Hospital, Belfast. Patients undergoing mastoid cavity obliteration as part of primary or secondary procedure with S53P4BAG Bioactive Glass (BonAlive) between 2012 – 2018 were included. Outcome measures were assessed by otoscopy at outpatient review and other clinical notes.

Results

92 patients were included. During the follow up period, (mean = 22 months; range = 6 - 59 months) cholesteatoma recidivism was observed in 2% of ears, (2 patients). An acceptably dry (Merchant Grade 0 – 1) ear was achieved in 96% of all ears. Surgical Site Infection or delayed graft healing occurred in 13% (12 ears), but in all cases conservative management resulted in complete healing.

Conclusion

1. S53P4BAG Bioactive Glass (BonAlive) provides a safe and effective means of mastoid obliteration.
 2. Complications including overlay graft failure, prolonged post-operative discharge (up to 2 months) and dehiscence into the external ear canal do not preclude full recovery and successful outcome with conservative management.
 3. Patient selection remains key to successful outcomes and in our study to date has resulted in no revision mastoidectomies in previously obliterated cavities.
-

A PARADIGM SHIFT IN ADULT COCHLEAR IMPLANT CRITERIA?

Objective

The National Cochlear Implant Programme (NCIP) in Dublin, Ireland has always followed the UK's National Institute for Health and Care Excellence (NICE) guidelines. These guidelines however, may be too restrictive for adults in determining CI candidacy. From 2016, the adult CI criteria was changed to allow more flexibility in determining adult candidacy, providing better access to CI technology to those with severe-profound hearing loss, irrespective of age.

Methods

In January 2016, the adult CI audiology criteria were changed to include the following; binaural severe (>65 dB HL) SNHL at 2-4kHz and Bamford Kowal Bench (BKB) scores <65% in at least one ear. CI recipients were separated into three groups. Group 1: pure tone audiometry (PTA) above 90 decibels (dB) at 2-4kHz and BKB scores within NICE criteria (BKB < 50%), Group 2: PTA above CI

NICE criteria and BKB scores within NICE criteria and Group 3: PTA meeting NICE criteria and BKB scores above NICE criteria.

Results

There were 76 patients in total within the 3 groups: Group 1, n=33, Group 2, n=14, Group 3, n= 29. Pre and post-operative BKB scores improved across all 3 groups. Post-operative BKB scores in noise, within groups 2 and 3, demonstrated significant improvements.

Conclusion

Potential adult CI recipients with severe-profound hearing loss are being penalised for being good performers in speech testing despite the degree of hearing loss. Expanding adult CI criteria has improved outcomes, and the decision to implant should be made based on each patient's individual evaluation and performance assessment.

DECONSTRUCTING MICROSUCTION: HIERARCHIAL TASK ANALYSIS AN EDUCATIONAL TOOL

Objective

Mastering ear suctioning using a surgical microscope is an index procedure for Otolaryngology trainees. This procedure requires knowledge, technical skills and manual dexterity. Currently, trainees acquire this competence through observation, utilising an apprenticeship learning model. Here technical skills are passed on from the trainer to the trainee in a semi-structured and subjective way. We suggest that utilising a standardised training model for microsuction would accelerate skills acquisition and performance. This method would allow for objective trainer assessment and an opportunity to correct performance deficiencies through feedback.

Methods

We utilised hierarchical task analysis (HTA), as a tool to systematically analyse the various steps involved in microsuction. The overall task of microsuction was deconstructed into three key components - 1) What needs to be done, 2) What equipment is required , 3)What steps are required to carry out the task. Utilising video analysis of 6 ST2 trainees performing the task, we then analysed the procedure. Two ENT experts analysed the video footage of all 6 trainees. Each video was analysed twice.

Results

We utilised HTA as a method of systematically analysing the procedure of microsuction. We identified that the procedure consisted of 9 sequential steps, each associated with a specific recovery component for task resumption, if a difficulty arose. These 9 steps were consistently present in all videos reviewed by the ENT experts.

Conclusion

We systematically analysed video footage of microsuction being carried out by ST2 trainees utilizing HTA methodology. We have identified, that the task involves 9 sequential steps to be performed proficiently and each step is associated with a recovery component. We suggest, that introducing a standardised microsuction training video as part of BST training would accelerate microsuction skills acquisition and performance. Video analysis using HTA methodology would allow for objective trainer analysis and feedback.

SURFERS EAR IS NOT JUST FOR SURFERS!

Objective

To determine water athlete's awareness of surfer's ear or exostosis, and attitudes to wearing ear plugs

Method

Online survey of triathletes, kayakers, open water swimmers, sub-aqua and surfers. The national bodies of each sport were contacted and the survey disseminated among clubs. Awareness of surfer's ear was determined by 10 questions using a 5-point Likert scale. Attitudes to wearing ear plugs were determined by a 9-point qualitative questionnaire.

Results

Of 180 responses, 61.9% reported awareness of external auditory canal exostosis. On further analysis, 20.7% of respondents who had heard of exostosis displayed a poor knowledge of the condition. Predictors of knowledge included kayakers ($p=0.006$), standard ($p=0.02$), diagnosis of exostosis ($p=0.015$), athletes who partake in cold water activity all year round ($p=0.07$), and concern for developing exostosis ($p=0.03$). 73.5% had symptoms related to their ears, including trapped water (58.9%) and blockage e.g. wax (26.2%). Despite the fact that the overall attitude to wearing ear plugs was positive in 66.6%, only 22% reported regular use of ear plugs. Affection of hearing is the most frequently reported disadvantage of their use.

Conclusion

There is poor awareness of surfer's ear among water athletes. 77% of water athletes wished to know more about exostosis with 65% preferring this via social media. An awareness campaign for exostosis needs to be implemented to prevent disease progression.

IS BILATERAL ALWAYS BETTER? THE BELFAST PATHWAY FOR COMPLEX NEEDS CHILDREN

Objectives

1. Review the populations of children undergoing Unilateral, Delayed Sequential and Bilateral Cochlear Implantation over a ten-year period.
2. Review the Speech and Auditory outcomes in children with Neuro-developmental conditions undergoing Unilateral Cochlear Implantation
3. Review the impact of delayed sequential Cochlear Implant on children whom go on to perform well with Unilateral Cochlear Implantation.

Methods

A retrospective case review of children undergoing Cochlear Implantation through the Auditory Implant Centre, Belfast from 2008 to 2017 was performed. Data was analysed both quantitatively (Categories of Auditory Performance (CAPS) and Speech Intelligibility Rating (SIRS)), and qualitatively.

Results

75 children have received unilateral cochlear implants. 12 patients have proceeded to undergo Delayed Sequential Implantation. The complex neuro-developmental unilateral Implanted children demonstrated, on average, an increase in SIRS from 1 (speech sounds) to 2 (Single words). The equivalent change in CAPS was from 2 (responding to voice) to 3 (identifying environmental sounds.) In all of children where sufficient time has passed following delayed

sequential implantation, to allow for follow up assessment there has been no change in CAPS/SIRS and all still require non-mainstream schooling.

Conclusion

1. Unilateral and Sequential Bilateral Cochlear Implantation in children with Complex Neuro-developmental needs have a relatively minor quantitative impact.
 2. Sequential Cochlear Implantation in children with Complex Neuro-developmental needs may result in some qualitative improvement.
 3. Unilateral Cochlear Implantation in children with Complex Neuro-developmental needs, with the option of sequential surgery is economically advantageous.
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STEREOTACTIC RADIOSURGERY IN THE PRIMARY MANAGEMENT OF VESTIBULAR SCHWANOMMA AND RESIDUAL DISEASE FOLLOWING MICROSURGERY

Objective

Vestibular schwannomas (VS) are the most common neoplasm of the cerebellopontine angle. Advances in radiological imaging have led to an increased diagnosis of these benign, intracranial tumours. Stereotactic radiosurgery (SRS) is widely considered the gold-standard treatment for small to medium-sized vestibular schwannomas. The aim of our study was to investigate the outcomes of patients referred for SRS for primary management of vestibular schwannoma and for treatment of residual disease following microsurgery.

Methods

A retrospective review of a prospectively maintained Neuro-Otology and Skull Base database was performed to identify patients treated with SRS for vestibular schwannoma. Patient demographics, SRS treatment received, tumour size reduction, time taken to achieve reduction and associated complications were assessed.

Results

A total of 1246 patients with vestibular schwannoma were reviewed from our database. 278 patients received treatment with SRS for vestibular schwannoma. Reduction in tumour size and time interval to reduction are described, together with patient demographics. The clinical course of patients treated with primary SRS and SRS for residual disease following previous microsurgery are discussed. Complications secondary to treatment were rare.

Conclusion

SRS remains the treatment of choice for radiologically-enlarging, small-medium sized vestibular schwannomas, demonstrating satisfactory tumour reduction with low morbidity and recurrence risk. Management within a multi-disciplinary Neuro-Otology and Skull Base team is recommended for these patients.

TRIGEMINAL AND SENSORY NERVE STIMULATION DRIVES EXTENSIVE BRAIN PLASTICITY: NEW OPPORTUNITIES FOR TINNITUS TREATMENT

Objective

New neuromodulation technologies are emerging to treat various health disorders. A novel paradigm, referred to as bimodal neuromodulation, combines electrical stimulation of peripheral nerves with a sensory input or motor task to drive specific plasticity within the brain. We investigated if electrical

stimulation of somatosensory pathways combined with sound stimuli could drive plasticity within the auditory system relevant for tinnitus treatment.

Methods

In guinea pigs, electrical pulses were presented to different body locations, including the tongue, ear region, neck, back or limbs. Body electrical stimulation was paired with customized sound stimuli with varying inter-modality delays. Neural responses before and after bimodal neuromodulation were recorded from the midbrain and cortex to analyse the extent and type of plasticity elicited within the auditory brain.

Results

Our data demonstrate that somatosensory pathways broadly and extensively interact with neurons along the auditory pathway. When combining sound and body stimulation, significantly greater brain plasticity was achieved within the auditory system compared to that of acoustic stimulation alone (~two-fold, $p < 0.05$), and the types of plasticity effects were significantly dependent on inter-modality timing. Furthermore, bimodal neuromodulation with electrical stimulation of the tongue versus other peripheral nerve pathways more consistently elicited brain changes relevant for tinnitus treatment.

Conclusion

Bimodal neuromodulation is emerging as a promising and safe stimulation approach for tinnitus treatment, in which several independent groups have consistently demonstrated positive outcomes in animal and human studies. Based on our animal findings, bimodal neuromodulation combining sound and tongue stimulation provides a promising new approach for treating tinnitus.

SAFETY AND EFFICACY OF A NEW BIMODAL SENSORY NEUROMODULATION TREATMENT FOR TINNITUS EVALUATED THROUGH A RANDOMIZED CLINICAL TRIAL IN 326 PATIENTS

Objective

Tinnitus is a major health issue in our society with no proven efficacious device or drug treatments. A blinded and randomized clinical trial in 326 tinnitus patients was performed to evaluate the safety and efficacy of a new home-use neuromodulation device, consisting of auditory and trigeminal (tongue) stimulation.

Methods

Three stimulation algorithms (PS1, PS2, PS3) were tested. Treatment was delivered for 12 weeks with a take-home device (recommended for one-hour usage per day). The patients were randomized across two clinical sites (in Ireland and Germany) to the three treatment arms. Pre-specified outcome measures included the Tinnitus Handicap Inventory (THI) and Tinnitus Functional Index (TFI) that were measured at the start, interim and end of the 12-week treatment as well as several post-treatment time points up to 12 months.

Results

All three stimulation algorithms resulted in statistically significant ($p < 0.0001$) improvements in tinnitus during treatment for both THI and TFI that were also clinically significant (> 7 THI points, > 13 TFI points). Large improvements in tinnitus occurred within the first 6 weeks with further improvement in the second 6 weeks of treatment. Post-treatment, PS1 resulted in persistent long-term improvements lasting 12 months after treatment ceased that clinically outperformed the other

stimulation algorithms. There was high treatment compliance (84%; >36 hours of usage) and the device demonstrated a good safety profile.

Conclusion

These findings demonstrate that bimodal neuromodulation can safely provide fast-acting tinnitus treatment with long-lasting therapeutic effects post-treatment that has been shown in one of the largest randomised clinical trials for tinnitus.

Free Paper Session 4 – Paediatric ENT

DISEASE-SPECIFIC QUALITY OF LIFE IN CHILDREN WITH RECURRENT ACUTE OTITIS MEDIA AND OTITIS MEDIA WITH EFFUSION

Introduction

Otitis media (OM) is inflammation of the middle ear an episode of which occurs in virtually all children by six years of age. OM causes a significant burden for children, their parents and health care systems. OM frequently results in functional limitations of hearing resulting in communication problems and speech and language delays. The aim of this project is to analyse the different factors that contribute to the quality of life of children that present with otitis media.

Methodology

Children presenting to paediatric ENT services with a history of either recurrent acute otitis media (RAOM) or otitis media with effusion (OME) were recruited. Informed consent was obtained. Interviews were carried out with a parent of the recruited patient. Exact symptoms were clarified and the validated Otitis Media 6 questionnaire was completed.

Results

A total of 76 patients were included in this study. 71% (n=54) were male. The mean age at the time of presentation to clinic was 6 years (range 6 months- 16 years) with a standard deviation of 3.4 years. The metrics the survey looked at included hearing loss, physical suffering, emotional distress and limitations of physical activities.

Conclusion

In this population, there is a greater incidence of otitis media in male children. For all instances that a patient was followed up having undergoing ventilation tube (VT) insertion, there was overall improvement in all categories of the survey.

WHEN IS IT SAFE TO DO THE FIRST TRACHEOSTOMY TUBE CHANGE?

Objective

The first tracheostomy tube change is typically performed on days 5-7 postoperatively, however a recent international review suggested that, with maturation sutures, days 3-5 is appropriate. We evaluate whether a first tube change within 48 hours is safe and effective.

Methods

We used a prospective database of all patients undergoing tracheostomy between 2009 and 2018. Patients were excluded if they were not done by the senior authors, were done elsewhere, maturation sutures were not used or they died prior to first tube change. We noted patient details, indication for tracheostomy, the need for long-term ventilation (LTV), timing of the first tube change, decannulation and need for surgical closure of persistent tracheocutaneous fistula.

Results

93 patients were identified, of which 83 were included. The age range was 0-16 years, with the youngest day one of life and an overall mean age of 1.91 years. 59% of patients required long-term ventilation due to various co-morbidities. 26 patients (31%) underwent a first tube change within 48 hours post-operatively. All these were uneventful and were irrespective of the patient's need for LTV. Of the 42 patients who have subsequently been decannulated, 33 (79%) were noted to have a persistent tracheocutaneous fistula requiring surgical closure, four of whom needed revision closure.

Conclusion

This study shows that a first tube change within 48 hours is safe, facilitating earlier discharge from intensive care and parental training. Although maturation sutures are linked with a higher rate of tracheocutaneous fistula, this can be subsequently surgically closed.

MANNOSE BINDING LECTIN DEFICIENCY: A CASE SERIES OF CHILDREN PRESENTING WITH ENT INFECTIONS

Objective

Mannose Binding Lectin (MBL) is an acute phase protein involved in the innate immune system. Young children with MBL deficiency seem to be more susceptible to infections which usually affect the upper airways. This study looks at presenting ENT symptoms in MBL deficient patients.

Methods

Patients tested for serum-MBL between 2010 and 2016 were identified at a tertiary centre immunology laboratory. Inclusion criteria were children less than 14 years with MBL deficiency of <1300ng/ml and recurrent ENT infections. The incidence of infections was calculated retrospectively using patient notes and positive microbiological cultures.

Results

Ten patients were identified with an average age of 5½ years (range 1-11); 70% were male. Level of deficiency in affected individuals was 20 – 722ng/ml, representing mild, moderate and severe MBL deficiency. Recurrent acute otitis media (AOM) was the most common presentation. 6 patients had recurrent AOM with discharge, accounting for 35 microbiologically proven infections. On average, each patient had six discrete episodes of AOM prior to diagnosis of MBL deficiency. 50% of organisms cultured were either H. Influenzae (31.4%) or Pseudomonas Aeruginosa (20%). Other

infections in the affected children included; otitis externa, atypical mycobacterial parotid infection, recurrent tonsillitis and oral thrush.

Conclusion

The role of watchful waiting, prophylactic antibiotics or surgical intervention is unclear for children with MBL deficiency; in an era of antimicrobial stewardship and cost savings for common surgical interventions, ENT surgeons should consider referral to infectious diseases for vaccination schedule or counselling regarding natural history of infections.

PAEDIATRIC DAY-CASE TONSILLECTOMY: A PILOT PROJECT

Objective

Paediatric day-case tonsillectomy has been commonplace in the healthcare systems of the United Kingdom and the United States for years, it has until now yet to be trialled in an Irish setting. The aim of this pilot study is to trial the safety of this procedure in an inner-city Dublin paediatric population.

Methods

An audit of post-tonsillectomy haemorrhages in patients undergoing tonsillectomy in Temple Street between 2016 and 2018 was performed, and found that coblation tonsillectomy represented the technique with the lowest post-operative bleeding risk. This technique was therefore adopted for patients who fulfilled specific criteria for day-case tonsillectomy.

Results

In total, 10 patients who met criteria underwent day-case tonsillectomy between July and September 2018. Of those patients, one patient represented within 24 hours of discharge with one isolated episode of self-limiting haemorrhage. T scores were recorded pre-operatively in all patients and re-performed after a period of six weeks; improvement was seen in all patients.

Conclusion

Tonsillectomy has the capacity to immensely ameliorate the quality of life of those afflicted with recurrent tonsillitis. With beds at a premium across adult and paediatric settings, this procedure unfortunately tends to be the first at risk of cancellation. Day-case tonsillectomy should be considered as a safe and effective way of circumventing this recurring issue.

PAEDIATRIC MYRINGOPLASTY: IS THE WAIT WORTHWHILE? SYSTEMATIC REVIEW AND META-ANALYSIS

Objective

The association between patient age and the success rate of myringoplasty procedures in the paediatric population, has always been a controversial topic in literature. This systematic review and meta-analysis aimed to determine this relationship. In the presence of a significant association, we would aim to identify the age at which myringoplasty should be considered.

Method

Medline, EMBASE and the Cochrane Library were searched according to the Preferred Reporting Items for Systematic Review and Meta-Analyses statement. Articles in which, patient age was compared to the success rate of myringoplasty were included. Only English language articles were included.

Results

20 articles, encompassing data from 2,244 procedures met the criteria and were included. A statistically significant difference in success rates was observed between those patients younger than 10, and those 10 or older ($p = 0.0017$), but no statistically significant difference was observed between age groups within discrete technique use groups.

Conclusion

Much debate on the optimum age has been conducted in the literature as reviewed. Rightly so, some authors regard age as but one factor of many related to surgical outcomes of type 1 myringoplasty in children. Our analysis showed a statistically significant difference between success rates under the age of 10 years, and those of 10 years and older. To the author's knowledge, there appear to be no position statements or official national or international guidelines on this matter. While our analysis is statistically significant, more comparison and consistent reporting should be conducted to fully understand paediatric myringoplasty outcomes.

THE APPROACH TO SUBPERIOSTEAL ORBITAL ABSCESSSES: WHEN TO OPEN?

Objective

Subperiosteal orbital abscess represents a common disease complicating paediatric sinus infection. The need for an open approach to drainage is rare, and there are no well-established guidelines on open approaches.

Methods

A retrospective study was conducted between 2008 and 2018. All children undergoing surgery for subperiosteal orbital abscess via endoscopic, open or combined approach were included. We analysed age, gender, co-morbidity, clinical presentation, CT scan report, surgical approach, outcome and complications. Cases were compared to currently proposed algorithms for surgical decision making.

Results

33 children underwent surgery for a subperiosteal orbital abscess secondary to sinusitis. The mean age was 7.45 years (range: 1-15 years). There were 19 male and 14 female patients. Seven (21%) underwent an open or combined approach. A subsequent open approach was required in three cases (9.1%) after failure of initial endoscopic drainage. One external approach needed revision surgery. The most common bacterium was streptococcus. *Fusobacterium necrophorum* was detected in one severe case. None of the patients developed intracranial complications. All patients underwent CT scanning and were under multidisciplinary team care (Paediatricians, ENT, Ophthalmology). All had evidence of sinusitis on CT. The mean abscess size in those who needed open approach was 3.7ml and five had frontal sinus involvement. All had proptosis.

Conclusion

A subperiosteal orbital abscess remains a challenging disease with need for multidisciplinary consultation and treatment. It is clear from this study, that not all cases can be solely treated endoscopically. We discuss our approach in relation to current guidelines.

MANAGEMENT OF CHILDREN WITH AIRWAY INJURIES POST INTUBATION. THE UNCUFFED TUBE STILL CAUSES SIGNIFICANT INJURY. THREE INTERESTING CASES.

Objective

Airway injury is a recognised outcome post intubation in paediatrics. In children under 2 the risk is higher as the airway is smaller and more fragile epithelium. This case series looked at three unusual

presentations that required intubation and ventilation with an ICU stay. Each presented back with stridor in recovery from their illness which needed intervention from ENT. In this case series two of the three patients were intubated with uncuffed endotracheal tubes. We wish to highlight that uncuffed endotracheal tubes can still cause injury post intubation. There also is a scarcity in the literature of studies looking at effects of intubation in children under 2 and on effects of prolonged intubation.

Methods

A retrospective review of three cases was performed. Three different cases are highlighted in this paper. All three cases involved the child being intubated for an amount of time. Each also ended up presenting later on with stridor and subglottic stenosis.

Results

Case A presented with bacterial tracheitis aged 15/12 after contracting influenza A and a pseudomonas tracheitis. She was intubated and ventilated for 5 days with a size 4.0 uncuffed tube. Two weeks post discharge she presented back with stridor that got worse over the coming weeks. An MLB later one month later diagnosed posterior glottic stenosis that was managed endoscopically. Case B presented with a large cyst that was obstructing his airway requiring him to need intubation and ventilation with a size 3.0 uncuffed tube. He was intubated for 13 days. The cyst was managed first with U.S guided aspiration and then surgery as the cyst was not resolving post this. He presented back with stridor and MLB diagnosed subglottic stenosis. He was also managed endoscopically and did very well post treatment. Case C was a young boy who presented with herpes zoster causing airway compromise.

Conclusion

This case series highlights that there is a definite risk of airway injury post endotracheal intubation in the paediatric population even with uncuffed tubes. Each patient in this series presented differently when needing intubation and later contracted subglottic stenosis. They are all doing well now and have been discharged from the airway clinic in Temple St.

AN UPDATE OF THE IMPACT OF UNIVERSAL NEWBORN HEARING SCREENING (UNHS) ON COCHLEAR IMPLANTED CHILDREN IN IRELAND

Objective

Cochlear Implantation (CI) is an established treatment for severe-profound hearing loss (HL). In April 2011, Universal Newborn Hearing Screening (UNHS) was implemented in Ireland. This research aimed to evaluate the CI clinical pathway for UNHS referrals and to compare functional outcomes between UNHS and Pre-UNHS referrals.

Methods

All cases referred to the National Cochlear Implant Programme (NCIP) via UNHS from November 2011 to December 2016 were categorised into two groups based on general health. Average times between the main milestones in the CI clinical pathway were evaluated. Secondly, functional outcomes, using Categories of Auditory Performance (CAP) and Speech Intelligibility Rating (SIR), were compared between implanted children with no additional needs referred via UNHS and those referred Pre-UNHS under the age of four, from January 2005 to June 2011. Factors investigated were age at referral and age at CI.

Results

Out of 100 children referred via UNHS, 76 were implanted. A third of these children had complex needs and received their CI with an average delay of 3 months compared to children with no additional needs. In addition to earlier referrals, children post-UNHS were significantly younger at the time of CI-surgery compared to children pre-UNHS (15.4 months vs. 33.3 months). For functional outcome measures three children had to be excluded (1=non-user, 1=explanted, 1= transferred). Children post-UNHS achieved better CAP and SIR scores 2 years post-implant onwards.

Conclusion

UNHS in Ireland is crucial for earlier diagnosis and intervention of congenital HL and is having a positive impact on functional outcomes in children.

Abstracts - POSTERS

#3 CHRONIC MAXILLARY ATELECTASIS (INCLUDING SILENT SINUS SYNDROME) CAN PRESENT BILATERALLY

J Ho, E Wong, E Tseros, D Gunaratne, N Singh

Objective

Chronic maxillary atelectasis (CMA) is a rare and underdiagnosed condition in which there is a persistent and progressive decrease in maxillary sinus volume secondary to inward bowing of the antral walls. CMA is typically unilateral. While extremely uncommon, bilateral CMA disease exists and can lead to significant sinonasal symptoms as well as ophthalmological and facial deformities in the later stages. We aim to challenge the current inclusion of unilateral disease in the definition of CMA.

Methods

A retrospective review of patient data from the senior clinician over a 3-year period (2015-2018) was performed. A comprehensive literature search was conducted to locate all documented cases of chronic maxillary atelectasis in English literature. Abstracts and full-text articles were reviewed.

Results

Three patients presented with sinonasal symptoms. Imaging findings were consistent with bilateral CMA. The literature review revealed at least nine other cases of bilateral CMA. Management is typically via endoscopic middle meatus antrostomy.

Conclusion

CMA was initially defined as a unilateral disorder but this description has been challenged by reports of bilateral cases. Further investigation is required to determine the aetiology and pathophysiology of the disease.

#7 THE TOP FIVE: ENT REFERRAL GUIDELINE FOR GENERAL PRACTITIONERS: A QUALITY IMPROVEMENT PLAN TO IMPROVE THE GP REFERRAL PROCESS TO AN ENT OUTPATIENT CLINIC

KN, Kellie Nwaokorie PJ, Pauline Joyce JPON, James Paul O' Neill

Objective

In the Health Service Executive, the General Practitioner acts as an arbitrator to secondary specialist care. The referral involves a transfer of clinical responsibility between professionals. However, the current Irish process is variable. There is an inconsistency of information in referrals directed to the Otolaryngology (ENT) department of a teaching hospital in Dublin. This Quality Improvement (QI) project plan centres on improving the GP referral process to an ENT clinic. The intent is to provide GPs with an explicit referral guideline for the most commonly referred presenting complaints. Consequently, creating a standardised referral process, and, over time, decrease the long outpatient waitlist.

Methods

Using the DMAIC (define, measure, analyse, improve and control) model for QI this project explores how improvements can be made to ensure more appropriate referrals. Adopting specific QI tools, including a driver diagram and process flow map, the factors contributing to unnecessary referrals were identified. Prospective quantitative referral data was collected over four months. Sample of 51 referrals was benchmarked against the ICGP referral form, assessing for quality, and graded to a maximum of 39 points.

Results

The five most commonly referred ENT conditions: Sinusitis (21.8%), Tonsillitis (21.1%), Hearing Loss (20.7%), Tinnitus (20.1%) and Swallow Disturbance (16.1%). N=51: 47% eReferral and 53% paper. Mean eReferral score is 23.8 and mean paper score is 19. In total 92% of referrals scored were deemed 'inappropriate'.

Conclusion

A concise GP guideline titled 'The Top Five' was created for implementation supported by a recommendation for the use of eReferral.

#8 THE VARIABILITY OF CALCIUM MEASUREMENT FOLLOWING THYROIDECTOMY: A NEED FOR CONCENSUS

D, McKenna; N Hope; D, McCaul; R, Gurunathan; M, Korda

Objectives

Hypocalcaemia following total and completion thyroidectomy is a well recognised complication. 23.6% of patients will develop hypocalcaemia, rising to 35% if a level VI neck dissection is performed. Monitoring and management of low calcium levels following thyroid surgery can be variable between surgeons. This work aimed to identify the variations in practice so that a standardised approach could be adopted across all members of the team to aid safe and effective care of patients.

Methods

A retrospective chart review of all patients undergoing total and completion thyroidectomy over a 12-month period at a single centre was performed. Demographic data and length of patient stay was noted. Data was collected on calcium and PTH testing. On identifying hypocalcaemia, the management strategy was documented.

Results

Data for 23 patients was collected. 5 patients developed symptomatic hypocalcaemia (22%). Presentation of severe hypocalcaemia was between D1 and D8 post-operatively. 3 patients were readmitted with symptomatic hypocalcaemia. 4 patients required IV calcium supplementation (17%). In total 10 patients received oral calcium supplementation. 6 different oral supplementation regimens were documented.

Conclusion

Hypocalcaemia in our cohort is consistent with that documented in the literature. The data shows the wide variability in managing patients in the immediate post-operative period. Due to the nature of shift patterns of junior doctors who are often the first port-of-call for these patients, a standardised approach to management is recommended to facilitate safe and effective care of these patients.

#10 DO SURGEONS GET IT RIGHT? A COMPARATIVE AUDIT OF ESTIMATED AND ACTUAL PAEDIATRIC ENT THEATRE TIME

S. Konstantinidou, M. Hussain

Objective

The aim of this audit is to ascertain if the predicted operation time in paediatric ENT cases matches the actual operation time, which plays a significant role in the efficiency of the scheduling process and theatre program.

Methods

We collected ENT waiting time booking data sheets from March to December (n=173). 118 of those had the estimated time for operation documented. We collected the theatre times from electronic theatre database (n=100). 94 of those had the estimated time for operation documented in the booking data sheets.

Results

In 87 out of 94 the operative (start to end procedure) time was less than predicted with an average difference of 21 minutes. Non-operative time in the theatre (time arriving in the anaesthetic room until out of the theatre minus operative time) was on average 20 minutes.

Conclusion

Paediatric ENT surgeons' estimation of theatre time seems to include non-operative time in the theatre and it is usually appropriate. However, the difference between the terms theatre and operative time should be clearly communicated with anaesthetic, theatre and clerking staff.

#11 ADJUVANT RADIOTHERAPY VERSUS SURGERY ALONE IN THE MANAGEMENT OF RECURRENT PLEOMORPHIC ADENOMA OF THE PAROTID GLAND: A SYSTEMATIC REVIEW

L. Mc Loughlin, S. Gillanders, S. Smith, O. Young

Objective

Recurrent pleomorphic adenoma poses a significant treatment challenge, considering its propensity for further recurrence and potential for malignant transformation. The role of adjuvant radiotherapy in its management is widely debated. The aim of this study was to determine whether adjuvant radiotherapy is more effective than surgical resection alone in patients with recurrent pleomorphic adenoma of the parotid gland, in terms of further recurrence, malignant transformation and treatment related complications.

Methods

Using PRISMA guidelines, a systematic review comparing adjuvant radiotherapy with surgery alone in the treatment of recurrent pleomorphic adenoma was conducted. Pubmed, OVID, EBSCO, Embase, The Cochrane Library, SCOPUS and OpenGrey databases from 1988 to 2018 were searched. Quality analysis was carried out using the Newcastle-Ottawa Scale and narrative synthesis used to summarise results.

Results

Of 891 records screened, eight studies were included, assessing 366 participants. Two noted a benefit of adjuvant radiotherapy in reducing further recurrence. The remainder did not show significant benefit, although four showed a trend towards lower rates. Only one case of malignant transformation was identified in a patient not irradiated. Similar rates of facial nerve dysfunction were identified between groups.

Conclusion

The available evidence suggests that adjuvant radiotherapy reduces recurrence rates in patients with recurrent pleomorphic adenoma and certain adverse prognostic factors. While it appears not to have significant adverse effects, given the lack of prospective evidence, we recommend careful use in patients at high risk of further recurrence and further research in the form of well-designed randomised controlled trials.

#12 FACIAL PAIN? TRY THE ED

N Reid, D Dick, C Scally

Objective

Case report of a 71-year-old man with increasingly severe and disruptive facial pain. Objective is to examine the role of cross-sectional imaging in this and similar cases, with literature review.

Method

Case report of suspected trigeminal neuralgia presented. This patient was eventually diagnosed with a large space occupying and pons-lateralising trigeminal neuroma. This was missed (retrospectively seen) on initial CT, and was picked up on MRI after the patient went to the emergency department with increasing pain. Review of literature performed to examine CT vs MRI in facial pain syndromes.

Results

The literature reveals these tumours to be rare. Trigeminal schwannomas (TS) account for between 0.07% and 0.36% of all intracranial tumors and 0.8% and 8% of intracranial schwannomas. Our case fits with current literature in terms of presentation (pain and paraesthesia), though contrary to some of the literature the lesion was nearly invisible on CT scanning, only seen in hindsight and even then with difficulty. (Captures from CT and MRI in presentation.)

Conclusion

We present this case as a reminder to investigate unexplained pain, as well as an update on the rare diagnosis of trigeminal neuroma and its management. CT can be insufficient in diagnosing soft tissue masses causing significant symptoms. MRI, though less available, may be the best first line option for investigating apparent fifth nerve problems. Persistent pain should be taken at face value and diagnosis reconsidered if not responding to treatment.

#13 INTRODUCING RAPID ACCESS CLINIC FOR THE MANAGEMENT OF URGENT ENT CONDITIONS: THE EXPERIENCE OF AN ACUTE GENERAL HOSPITAL

S Konstantinidou, CM Smyth

Objective

Our department recently introduced a Rapid Access Clinic to convert unplanned ward attender assessment of patients with urgent ENT conditions into planned clinic work. The aim of this service is to improve patient safety and efficiency. We plan to enhance training opportunities for junior doctors and improve communication with primary care. Referrals are received by e-mail and Clinical Commissioning Group system. They are triaged by consultants and Rapid Access Clinic is run by a middle grade doctor twice weekly. The objective of this audit is to assess the effectiveness of the Rapid Access Clinic.

Methods

We collected data from all patients seen in Rapid Access Clinic since it was first introduced, in June 2018. We gathered information regarding the number of patients seen, referral source, diagnosis and requested follow-up appointments. The information was obtained from patient notes including e-triage system and discharge letters.

Results

Over 150 charts were reviewed. The main sources of referrals were Emergency Departments and General Practitioners. The mean time from referral to appointment was 6.7 days. The most common presentations were nasal injury and epistaxis. On average 7.3 patients were seen in the clinic, with a range from 2 to 12 patients per clinic. The majority of patients were discharged, while some of them required further ENT input.

Conclusion

This audit suggests that Rapid Access Clinic is a safe, effective and timely service for patients presenting with urgent ENT problems. It provides better quality care for patients and improves the working environment for junior doctors.

#14 AN EXPLORATORY STUDY OF CO-MORBIDITIES AMONG EPISTAXIS PATIENTS ADMITTED AT A TERTIARY SCOTTISH HOSPITAL

Kwee Yen Goh, Gavin Donaldson, Helin Darat, Sangeeta Maini, Bhaskar Ram, Raghav Dwivedi
Objective

Epistaxis is one of the commonest emergencies seen in accident & emergency and ENT departments. Majority of epistaxis patients requiring hospitalisation present with multiple co-morbidities which may impact their outcomes. The aim of this study was to explore co-morbidities among inpatient epistaxis patients at a tertiary Scottish Hospital.

Methods

A retrospective cohort-study was conducted from January-June 2017 and included one-hundred consecutive patients. Clinical details, co-morbidities and demographics of these patients were collected electronically via Trakcare. Data was analysed using qualitative and quantitative analyses.

Results

Mean age (SD) of patients was 71.0 (13.7) years with male: female ratio of 2.2:1. Eighty-two percent patients were >60 years of age. Overall 93% patients had associated co-morbidities, 84% had two or more co-morbidities, 11% had one co-morbidity and 7% no co-morbidities. Commonest co-morbidities were hypertension (HTN) (37%), acute coronary syndrome (ACS) including ischaemic heart disease (IHD) (24%), atrial fibrillation (AF) (19%), diabetes mellitus (DM) (16%) and malignancies (13%). Mean hospital stay for patients with single-comorbidity was 1.41 days while 1.60 days for patients with multiple co-morbidities.

Commonest co-morbidities in patients <60 years were HTN, alcohol-abuse and previous ACS while in >60 years were HTN, ACS and DM. Commonest co-morbidities in males were HTN, ACS and AF while in females were HTN, DM and AF. The commonest co-morbidity in patients with single co-morbidity was myocardial infarction while in patients with multiple co-morbidities were HTN, ACS and AF.

Conclusion

Males >60 years of age with >2 co-morbidities especially HTN, ACS and AF are more likely to be inpatients for epistaxis.

#17 DELAYED PRESENTATION OF VISUAL LOSS FROM AN ETHMOID MUCOCELE. SHOULD WE OFFER EMERGENCY DECOMPRESSION?

P Coyle, A Dias

Objective

Traditional teaching suggests that optic nerve damage is permanent after 90 minutes. Our case however shows that a proactive approach can improve symptoms significantly even at a late stage.

Method

50-year-old female presented with three days of blurred vision and a 20-hour history of complete visual loss in the left eye. Urgent MRI brain and orbit privately showed a left sided ethmoid mucosal compressing the left optic nerve. She had no nasal symptoms and flexible nasendoscopy showed a left large bulging ethmoid bulla. CT Sinus reported destruction of the left optic canal and compromise of the left optic nerve. An emergency FESS and decompression was performed out of hours.

Results

Ishihara tests post operatively showed right eye 17/17 and left eye 0/17 with no response to light. However, at her 6-week ophthalmology review she had the ability to count fingers. Her main concern was depth perception which she was reassured, she would compensate for over the next 3-4 months.

Conclusion

Mucoceles are a collection of sinus secretions trapped due to obstruction of a sinus outflow tract. It is an expansile process. Surgery is the treatment of choice and most are done endoscopically but an open approach can be used. General guidelines for surgery for mucoceles are:

- Identify skull base posteriorly
- Marsupialise widely, removing all osteitic bone from the opening
- Make the opening flush with the surrounding bone.

We conclude compressive optic neuropathy should have surgical intervention immediately even if visual loss has been sustained.

#19 STREAMLINING OF OTITIS MEDIA WITH EFFUSION (OME) REFERRAL PATHWAY.

M. Barron, A. Jones, G. Fayad.

Objective

to evaluate standards within NICE guidance and improve patient's journey. Current NICE guidance, suggests that persistence of bilateral OME and hearing loss should be confirmed over a period of 3 months (13 weeks) "wait and watch" period, before intervention is considered. The child's hearing should be regularly followed up and re-tested during "wait and watch" period. Gold Standard of total pathway from GP referral to surgical ENT treatment should be within 18 weeks, including the period of 13 weeks "watch-wait". Further quality improvement project is suggested in order to improve pathway if required.

Methods

A retrospective study performed over 3 months, selecting 32 paediatric patients aged 4 to 16, who were referred by GP for further investigation and surgical treatment.

Results

- GP to Child Hearing Service (CHS) 1st appointment 3 weeks
- CHS 1st appointment to ENT referral 11 weeks
- CHS referral to 1st ENT appointment 11 weeks
- 1st ENT appointment to Date of surgical treatment 12 weeks
- Total pathway (GP to Treatment) 37 weeks

Conclusion

Compliance level not met 100%. Delay with treatment of OME is strongly associated with risk of significant impact on children's development, social and educational status.

Foreseeable, time spent awaiting surgical treatment for OME can be reduced significantly by Introduction of a monthly ENT Consultant Lead dedicated Children's OME Clinic for decision making based on Dynamic Audiogram, Tympanogram findings +/- photographic otoscopic picture and listing for surgical treatment without needing ENT OPD for children.

#27 REVIEW OF A RAPID ACCESS ENT CLINIC: OUR EXPERIENCE IN A REGIONAL TEACHING HOSPITAL

R O'Neill, E Lang, B Mahesh, L Skinner, D Smyth, M Donnelly

Objective

We aimed to assess the performance of the rapid access ENT (RACE) clinic in treating patients with subacute ENT conditions in an effective and timely manner. Referrals and subsequent management plans were analysed. We aimed to assess if any patients needed ENT specialist review or if their condition had resolved by the time they attended clinic. Clinic waiting times were audited and non-attendance rates reviewed.

Methods

A prospective case notes review of all patients attending the rapid access ENT clinic was performed over a 6-week period. A hospital data recording system was also used to gather information regarding waiting times and non-attendance.

Results

141 clinic appointment slots with 116 attendances were examined. 75% of patients attended clinic for otitis externa (OE) or nasal bone injury (NBI). 19% of appointment slots were unfilled, half of which were non-attendance related and half administration error related. Waiting times overall were low with mean waiting time for NBI 9.4 days. 45% of nasal bone injury patients either declined manipulation or did not need it. 39% of OE had resolved by the time the patient reached clinic. Other referral patterns such as sialadenitis and ear foreign body received high rates of specialist intervention.

Conclusion

The RACE clinic is a useful facility for providing specialist ENT treatment for subacute ENT patients in a timely manner. This study also suggests that many referrals could be managed in emergency departments or general practices if appropriate training was provided.

#28 LASER RESECTION OF EARLY GLOTTIC CARCINOMA, A SINGLE CENTRE REVIEW

A.Nae, O.Young

Objective

Our study purpose was to assess outcomes of transoral laser microsurgery (TLM) resection of early glottic carcinoma focusing on recurrence, survival rate and voice outcome.

Methods

A retrospective study investigating a single surgeon database was performed in our department covering the seven years from 2011 to the present. Inclusion criteria were patients diagnosed with Tis and T1 vocal cord carcinoma and who were treated with TLM as a primary treatment modality. Patient demographics, tumor location, histopathology, complications, recurrence rate and voice outcomes were all assessed.

Results

Fifty patients met our inclusion criteria. Males predominated with 41 out of 50. The median age in our group was 67 years (range 41- 89). A second laser excision was performed in 13 cases, while 6

patients had 3 or more repeated procedures. Of 50 patients, 5 required radiotherapy for residual or recurrent disease over the course of our study. Overall voice outcome was satisfactory with 36 patients (72%) having normal voice, 1 improved, 11 had hoarseness (22%) and 2 cases not documented. Follow up ranged from 2 weeks to 5 years. Four patients (8%) died during the study period, none of which was due to their glottic malignancy.

Conclusion

Our data suggest that early glottic carcinoma can be safely managed surgically with TLM. Our recurrence rates and voice outcomes compare favorably with those in the literature. Close follow up is indicated in all cases to allow detection of early recurrences and facilitate further laser resection if necessary.

#29 INCIDENTAL NEUROLOGICAL FINDINGS ON MRI IAM IN THE SOUTH EASTERN TRUST

D McCrory, D Gallagher, RA Adair

Objective

To determine the frequency and management of incidental neurological findings on MRI IAM of patients with audiovestibular symptoms in the South Eastern Trust.

Methods

We performed a retrospective analysis using radiology records of patients who underwent an outpatient MRI IAM under the care of an ENT consultant in the South Eastern Trust between March 2017 and March 2018. Exclusion criteria included known acoustic neuromas and cholesteatomas. A proforma was used to collect data on demographics and indication for request. The radiologists' reports were also recorded and patients' past medical history and drug history were searched in cases of an incidental finding.

Results

275 patients were referred for MRI IAM but only 223 had the investigation. Fifty-two patients either DNA, cancelled or had known acoustic neuromas/cholesteatomas. 50% of the indications for MRI IAM were unilateral hearing loss. One patient had an acoustic neuroma identified. 71 patients (31.8%) had an incidental finding reported. The most common incidental finding was chronic small vessel disease (n=48) Thirty-two of these patients had no prior history of vascular disease and were not on any primary preventative medications. In 7 of these cases, the GP was asked to follow up. Some other incidental findings include MCA aneurysm, demyelination, arachnoid cysts, meningioma, cavernoma, pineal cysts.

Conclusion

This study illustrates the high frequency of incidental findings on MRI IAM. It is the responsibility of the referring surgeon to be aware of these findings and their significance. It also highlights the importance of informed consent prior to MRI as incidental findings can cause unnecessary stress and potential implications for medical and life insurance.

#30 THE ROLE OF A “VIRTUAL” TELEPHONE CLINIC IN THE FOLLOW-UP MANAGEMENT OF BENIGN LATERAL SKULL BASE TUMOURS

S. Hogan, C. Fitzgerald, D. Rawluk, M. Javadpour, R. McConn-Walsh

Objective

To determine the impact a “Virtual” Telephone Clinic (VTC) has on the length of time patients waited for results of follow-up scans, the travel distance saved by patients, the effect the VTC had on the number of patients attending face-to-face outpatient clinics (FTFC) in the National Neuro-otology & Skull Base Service.

Method

90 patient's data from the VTC were recorded from February 2018 until August 2018 and analysed. Length of time (in days) was calculated for Group A (scan date to VTC) and Group B (previous scan date to FTFC). All patient's county of residence was recorded and distance in miles to the hospital calculated.

Results

Introduction of the VTC has reduced patients waiting time for scan results by 39% when compared to their previous scan results. Average length of time from scan to VTC (Group A) was 28 days compared to 46 days for FTFC (Group B). Percentage of patients given results via VTC amounted to 23% of patients reviewed by the Neuro-otology & Skull Base Service. Average miles saved by patients not travelling to the hospital for results were 129 miles (round trip).

Conclusion

VTC has benefits to both patients and the Neuro-otology & Skull Base Service. VTC reduced the length of time and travel required for patients to receive follow-up scan results and reduced the number of patients requiring FTFC appointment.

#28 THE USE OF A STAGING POSTER AS A VISUAL REFERENCE AID AT THE HEAD AND NECK MDT

R. O'Shea, T. Moran

Objective

The MDT on its own has been shown to markedly improve and standardise patient care since its inception, this is further enhanced by ever-evolving staging systems such as those put forward by the American Joint Committee on Cancer (AJCC). The 8th edition of the AJCC Staging Manual brings with it multiple important changes for instance the separate staging for high-risk HPV-associated cancer of the oropharynx. Due to the inherent expansive nature of its content, it can undoubtedly prove difficult to commit to memory. Furthermore, within the often-quick-fire MDT it can be difficult to recall with accuracy. This can lead to incorrect staging and ultimately inappropriate treatment.

Methods

Quick reference posters are available from the AJCC for breast, cervical and lung cancers among others, and are recommended for display at cancer conferences (MDT). Unfortunately, no such aid is currently available for head and neck cancers. Our aim was to create such a poster, display it at our MDT and subsequently assess its benefit through questioning core MDT participants.

Results

Most respondents agreed that the provision of this poster was beneficial for the efficiency of the MDT.

Conclusion

Reliance on recall alone can predispose to error which can ultimately lead to negative patient outcomes. The use of well positioned, quick reference visual aids such as staging posters can enhance the head and neck MDT.

#39 THE FRONTIER IN ENDOSCOPIC EAR SURGERY: LOCAL VS INTERNATIONAL EXPERIENCE IN ITS EVOLUTION

RB Speaker, E Farrell, SG Khoo

Introduction

The Introduction of the rigid endoscope to operative Otolaryngology constitutes a major step forward. At our institution endoscopes are regularly employed for grommet placement, tympanoplasty, mastoidectomy, ossiculoplasty and middle ear explorations. Internationally, the endoscope has been employed not only in the middle ear but also in neuro-otology and lateral skull base surgery.

Methods

A retrospective chart review was undertaken of all patients undergoing endoscopic ear surgery at a single center.

Results

82 patients had 87 endoscopic ear procedures in our center. These procedures included 6 atticotomies, 28 grommet insertions, 24 tympanoplasties, 7 mastoidectomies, and 22 others. The tympanoplasty closure rate was 92% which compares favorably with our microscopic rate of 94%

Conclusion

Endoscopic ear surgery is a field in evolution with some centers advancing so far as to perform complex minimally invasive lateral skull base resections. With advancements in technology including Piezo-electric dissection and miniaturization of endoscopes, endoscopic surgery of the ear has become a promising new wave in otology. The authors would like to conclude by paying tribute to the recently departed Dr. David Pothier. Dr. Pothier's extensive work helped expand the field of endoscopic otology and included the training for the senior author.

#41 ADENOID CYSTIC CARCINOMA: A SINGLE CENTER REVIEW

RB Speaker, E Farrell, T Moran, T O'Dwyer

Introduction

Adenoid Cystic Carcinoma (ACC) is a rare malignant tumor of the Head and Neck Constituting approximately 25% of all salivary gland malignancies. Most commonly arising within salivary glands, adenoid cystic carcinoma has been documented in other subsites of the head and neck (Larynx, trachea, External auditory canal), as well as, sites outside the head and neck (Breast, lung and Cervix). Its propensity for late distant recurrence in the lungs and peri-neural invasion combined with its relative resistance to both chemotherapy and radiotherapy provide a complex clinical challenge

Methods

The pathology database, clinical letter database and HIPE data were all queried for the terms “adenoid” “Cystic” and “carcinoma” for all patients seen from July 1999 to July 2018. Any patients with primary site outside the head and neck were excluded and a retrospective chart review of all patients was undertaken.

Results

35 patients met inclusion criteria. Mean age at diagnosis was 53.4 years. 48.6% were female. Average duration of follow-up was 4.8 years. 25.7% were treated with surgery alone, 57.1% had surgery with adjuvant Radiotherapy +/- Chemotherapy, 17.1% had radiotherapy alone. Overall survival at 5 years was 77.1%. There was no significant difference in survival at 5 years between those patients receiving surgery alone vs those receiving adjuvant radiotherapy.

Conclusion

Treatment of patients with ACC remains a challenge. While there is a clear role for surgical intervention the role of chemotherapy and radiotherapy remain controversial. Current genetic studies show some promise for developing novel chemotherapy targets. Given ACC’s propensity for late presentation with pulmonary metastases this cohort should have ongoing follow-up.

#42 YOU SPIN ME RIGHT ROUND BABY... ANALYSING STANDARD PRACTICE ON ASSESSMENT OF VERTIGO BY OTORHINOLARYNGOLOGY TRAINEES IN IRELAND

Gyan-Baffour, A., Speaker, B., Farrell, E., Khoo G

Objective

Vertigo, an illusory sensation of self or environmental movement is the most common type of dizziness. The evaluation of patients with dizziness and imbalance is always challenging and often frustrating, but with a careful, physiologically-based bedside examination one can arrive at the correct diagnosis. We can now probe the function of each of the semicircular canals and the utricle in isolation at the bedside. The aim of this survey is to analyse what the current standard practices are on assessing patients referred with chronic episodic vertigo to ENT clinics.

Method

After consultation with senior author a questionnaire was designed to ascertain Irish ENT NCHD’s clinical practice. The Survey questionnaires were sent to all ENT NCHD in Ireland. The questionnaire asked ENT NCHD’s to fill out questions about their bedside practices on assessing these patients. A total no of 30 questionnaires were answered and returned. Questions included tests for otoscopy, nystagmus, head shake, head thrust, VOR suppression, dynamic visual acuity, Dix-hallpike, Romberg, Unterberger, cerebellum and audiogram.

Results

Our results show 100% test performance of otoscopy, nystagmus, audio. 83% performed head-thrust test and 66% performed head shake test, Dix Hallpike, Unterberger, cerebellum test. Only 33% performed visual acuity and VOR suppression.

Conclusion

The practice of assessing the vertigo patient seems to be varying across ENT practices. A clear and organizes standard set for diagnosis will alleviated this challenge.

#47 'INDETERMINATE THYROID NODULES – CAN AN ULTRASOUND SCORING ‘APP’ RELIABLY REDUCE FNA DEMAND?'

S Garry, O. Young, A. Lowery, D. Sheppard

Introduction

An explosion has occurred in the diagnosis of thyroid nodules and cancers due to the advent of high-resolution ultrasonography, leading to an enormous strain on resources. The mortality rate however, has remained unchanged suggesting significant over-diagnosis of indolent or harmless thyroid tumours. Our aim is to assess the sensitivity and specificity of various thyroid ultrasound-scoring systems; specifically relating to indeterminate thyroid nodules and to assess whether any of them can reliably reduce the number of nodules needing fine needle aspirate biopsy.

Methods

A retrospective chart review was performed over a 6-year period of all patients undergoing thyroid surgery correlating pre-op cytology and post-op histology. The radiology department created an ‘app’ whereby entering the sonographic characteristics of each nodule, it would generate scores based on >10 published scoring systems. A consultant radiologist re-scored each of these indeterminate nodules and entered this data into the app.

Results

In total, there were 209 indeterminate nodules evaluated and operated on between 2012 and 2018. We found a malignancy rate of 32%. Our data shows that while there is a high sensitivity rate, there remains a relatively low specificity rate for most scoring systems. For example, the latest TIRADS guideline had sensitivity of 80% and a specificity of 24%.

Conclusion

While some of the more recent guidelines are concise and transferrable, our initial results suggest that they would not necessarily reduce the rate of FNAC. Further studies are needed before clinical practice can change and reduce the excessive and unnecessary outlay of resources.

#52 AN AUDIT ON SURGICAL TRACHEOSTOMY PERFORMED IN A COMPLEX CLINICAL SETTING.

A.Kibly, T.Subramaniam, E. O’Cathain, M.Colreavy, M.Amin, S.Kiernan, H.Rowley, T.Moran

Objective

The objective of this study is to audit outcomes of surgical tracheostomies performed by the otolaryngology team at the Mater University Hospital.

Methods

A retrospective review on consecutive surgical tracheostomies performed by the otolaryngology team from July 2017 – July 2018 is undertaken. We review patient demographics, surgical indications, post-operative complications and long term follow up findings.

Results

A total of 13 patients required surgical tracheostomy. The M: F ratio was 3.3: 1, mean age being 62 and with a range of 31 – 89. Obstructing airway tumour was the most common indication for surgery

(53%). Ten of the patients (77%) had a tracheostomy related complication with wound site infection (30%) and post operating bleeding being (30%) the most common.

Conclusion

Surgical tracheostomy is by otolaryngologist, often in a complex clinical setting. Complications can be minimized with careful patient selection, multidisciplinary approach in both pre, post-operative and long-term care of the patient.

#53 THE EVOLUTION OF THE TYPE OF MASTOID SURGERY PERFORMED FOR THE MANAGEMENT OF CSOM IN A SINGLE PRACTICE

JM Hintze, CWR Fitzgerald, R McConn-Walsh

Objective

The operative management of chronic suppurative otitis media (CSOM) has evolved significantly since the first scholarly publication describing mastoidectomy in 1873. In this study, we aim to review the changes in surgical technique at a single centre during an 18-year period.

Methods

A retrospective analysis of a prospectively-maintained database of all middle ear and lateral skull base surgeries in a single tertiary-referral centre was reviewed. Examining an 18-year period, the first 50 consecutive cases and the last 50 consecutive cases in the database were reviewed in detail to compare the operative techniques employed in the management of CSOM.

Results

A total of 598 middle ear surgeries were included in the database over an 18-year period. Analysis of operative techniques indicates a transition from a classical back-to-front, canal-wall-down, modified-radical mastoidectomy to approaches favouring front-to-back techniques, including attico-antrostomy and closed cavity surgeries for the management of CSOM. Video data and operative illustrations are used to demonstrate the techniques employed in the operative cases included in this study.

Conclusion

Data from this retrospective analysis indicates a shift from classical modified-radical, open mastoidectomy to more conservative and closed approaches to managing CSOM, allowing for better preservation of the anatomy and reduced long-term postoperative monitoring.

#54 RETROSPECTIVE AUDIT OF PATIENT SATISFACTION, PRE AND POST TONSILLECTOMY IN CHILDREN

M, Walsh, L, O'Keeffe. K O'Driscoll

Objective

This retrospective study reviewed 100 patients aged between 4-17 yrs who underwent tonsillectomy +/- adenoidectomy between July 2017-2018. The aim of the study was to assess patient/parent satisfaction with the overall health service provision relating to, outpatient facilities, doctor interaction, post-operative care, and management of associated complications.

Methods

Retrospective analysis of the operative and anaesthetic notes for each patient took place. Telephone call follow up was utilised, for assessment of post-operative course since discharge. A set of predetermined questions regarding interaction with hospital staff, facilities, missed school days, analgesia adherence, and overall satisfaction with the service provided was recorded.

Results

53% of the sample was female, the average age was 8yrs. Day case tonsillectomy is not performed in the unit. The average length of stay was 1.6 days. The waiting time from GP referral to OPD assessment was 6.4 months. The average number of days missed from school was 23 days. 61% of the patients found outpatient facilities excellent. 61.5% regarded interaction with the doctor to be excellent. Patients required analgesia on average 10.4 days. Overall satisfaction with the healthcare service provided for Tonsillectomy was 9.6 out of 10.

Conclusion

Measurement of patient satisfaction is a legitimate indicator for improving the services and strategic goals for all healthcare organisations. Recommendations noted from parents related mostly to waiting times from GP referral to OPD, which if reduced could potentially reduce absenteeism from school also. Nursing interaction with patients could be investigated further as it is a primary driver of patient satisfaction. Tonsillectomy is among a bundle of procedures deemed to be unnecessary in the UK, Funding may be withdrawn in the NHS.

#55 HEARING TEST APPS FOR SMARTPHONES: HOW SMART IS THAT?

C.Manole, S.Jaber, N.Patil

Objective

The increase in smartphone use and associated applications (apps) has led to the design of many apps for hearing evaluation. The high demand for audiology services in large geographically remote areas prompted us to evaluate the usefulness of these apps versus formal PTA assessment.

Methods

One Android app was selected for this study – (“Hearing test”) - based on number of downloads, user evaluation, free availability and literature recommendation. A group of randomly selected patients attending ENT clinics for hearing complaints were evaluated with the smartphone hearing test app as well as formal PTA.

Results

Known limitations of hearing test apps include inaccuracy for low frequencies and lack of distinction between conductive and sensorineural hearing loss. Our results noted that 30% of the patients had similar results on a hearing test app vs formal PTA while 50% of patients had a discrepancy of up to 20db and 20% of patients had a hearing test app result which did not correlate with the corresponding formal PTA. The hearing test apps showed thresholds similar to PTA in cases of middle ear effusion, tympanic perforation and post-grommet insertion.

Conclusion

Although smartphone apps are considered a more accessible method of evaluating hearing in the general population, results were affected by several factors including selecting a reliable app,

understanding of instructions, experience in using the app, and the testing environment. We found a role in using the apps for surveillance of patients in ENT OPD setting. As variations exist between the testing methods, formal PTA remains the gold standard.

#57 USE OF SIMULATOR IN ENT EDUCATIONAL DAYS FOR PRIMARY CARE PROFESSIONALS

S Konstantinidou, V Malik

Objective

ENT presentations in General Practice consist 25% and 50% of the consultations in adults and children respectively. Almost 70 % of GPs had less than a month exposure to ENT in medical school and only 25% of them had completed a hospital post in ENT. Not surprisingly, 75 % of GPs stated they would like further training in ENT. The objective of this study is to evaluate the impact of educational days in the confidence of primary care professionals in managing common ENT presentations. More specifically, we assessed the use of Ear stimulator in an ENT course for professionals in General Practice.

Methods

Eighteen delegates attended a half day ENT training session which included lectures, case discussions and workshop with ear simulator. The participants filled pre and post course questionnaire regarding management in primary care of common ear problems.

Results

All course attendees felt more confident in managing common ear problems in primary care and understood when to refer a patient to secondary care. Almost all found use of ear simulator particularly useful and 90% of them would recommend it for regular use in teaching and training sessions.

Conclusion

ENT Themed education days for primary care professionals are very useful especially due to lack of ENT exposure as medical undergraduate & postgraduate. Using simulators during these sessions further enhances their confidence in managing common problems in primary care.

#60 ASSESSING APPROPRIATE ANTIBIOTIC PROPHYLAXIS IN COCHLEAR IMPLANTATION

Aishan Patil, Fergal Glynn, Laura Viani, Peter Walshe

Antibiotic prophylaxis in and around cochlear implantation is based on the fact that there is a theoretical direct communication between the middle ear round window (via the cochlea aqueduct) and the subarachnoid space. Young children have a tendency towards middle ear infections and the ideal time for bilateral cochlear implant for a deaf child under normal circumstances is in and around the age of one year. This is prior to full maturation of the eustachian tube, and therefore these children are more prone to infections during their implantation. Importantly, perioperative protection has been really quite variable amongst different institutions around the world, with some preferring Augmentin prophylaxis. More recently in our unit we have tended to use a cephalosporin due to the fact that this penetrates the cerebrospinal fluid via the blood brain barrier whether the meninges are inflamed or not.

Five patients with congenital anomalies of the inner ear which predisposed them to perilymph perioperative gushers underwent sampling of the perilymph expelled into the middle ear at certain given times after intravenous administration of cephalosporin. The data looks at time of administration of the cephalosporin and perilymph / CSF titres as compared to the minimum inhibitory concentrations required for prophylaxis. This is the first study of its kind worldwide.

#65 VIDEO HEAD IMPULSE TESTING PATTERN FOLLOWING GENTAMICIN ABLATION FOR MENIERE'S DISEASE

Colin G Leonard, Neil Bailie

Objective

1. Is VHIT useful for quantifying the effect of Low Dose Gentamicin Ablation Therapy for Intractable Meniere's Disease?
2. Do VHIT results correlate to clinical outcomes in these patients?

Methods

Case series of three patients and their pre and post Gentamicin Ablation Therapy Video Head Impulse Test results.

Results

All three patients demonstrated relative preservation of the function of the Superior Semi-circular canal Vestibular Ocular Reflex. In contrast, the Horizontal and Posterior Semi-circular canals demonstrate more significant ablation.

Conclusion

1. VHIT offers a repeatable and consistent quantitative assessment of effect of Low Dose Gentamicin Ablation Therapy.
 2. In our series, clinical outcomes correlate with VHIT results pre and post Low Dose Gentamicin Ablation Therapy.
 3. The relative preservation of the function of the Superior Semi-circular canal is an unexpected finding that has no clear explanation based on current knowledge of Vestibular physiology.
 4. Our hypotheses are that there may be either biochemical, embryological or anatomical explanations for these findings. We will discuss these hypotheses within our presentation.
-

#66 NATIONAL AUDIT OF HEAD AND NECK CANCER REVIEWS: NORTHERN IRISH CONCLUSIONS

D Dick, N Hope, M Adams, C Smith

Objective

To assess adherence to national guidelines for surveillance of head and neck cancer, to determine a baseline of practice in the area of cancer recurrence surveillance, provide a platform for future improvement and to develop trainee collaborative links.

Method

This national audit was directed and supported by BAHNO and ENT Integrate. It comprised of a two-week retrospective and four-week prospective audit of practice, with introduction of a proforma to take the place of a clinical note for the prospective month. All patients under surveillance for head

and neck cancer were included, excluding thyroid and cutaneous malignancy. Demographic and consultation data was collected for each.

Results

N=164 across 4 sites, with demographics as expected for this cohort. Adherence to national guidelines in terms of time to review was high. Recurrence detection rate was 3.6%. There was some variation between sites in follow up timings and access to multidisciplinary teams. The proforma increased the recording of data between the two audit windows.

Conclusion

National guidelines are useful as a framework for surveillance. There will always be outliers in long term follow up. It was difficult to separate those who needed long term follow up for functional reasons and those who were still classed as 'under surveillance' for recurrence. The proforma did anecdotally and quantitatively make the review appointment more thorough. This audit shows a modern research network functioning well and has great potential for future projects.

#67 A RETROSPECTIVE STUDY OF APPARENT VOCAL CORD PARALYSIS - ARE WE ALWAYS LEFT IN THE DARK?

A. McHugh, B. Mahesh, D. Smyth, M. Donnelly, E. Lang, M. Farrell, L. J. Skinner

Objective

The assessment of hoarseness is a large component of any otolaryngology outpatient workload. Unilateral vocal cord paralysis without an apparent identifiable cause is a minor but worrying component of this cohort. Time consuming and extensive investigations are often necessary to try and identify an underlying aetiology. The primary aim of this study was to examine current practice in our department.

Methods

A systematic retrospective review of radiology conference notes, combined voice clinic stroboscopy files and NIMIS data was conducted to identify vocal cord paralysis patients without apparent identifiable cause. Data was collected in an encrypted database and exported to SPSS for analysis. A review of the recent literature was performed.

Results

The demographic, investigative and follow-up data from January 2013 to September 2018 at our centre will be presented.

Conclusion

Despite recognised investigative frameworks, unilateral vocal cord paralysis may pose a diagnostic challenge. True idiopathic vocal cord paralysis continues to be a rare entity.

#68 TIME TO RECURRENCE AND SURVEILLANCE PERIOD FOR HUMAN PAPILLOMA VIRUS POSITIVE OROPHARYNGEAL SQUAMOUS CELL CARCINOMA

L. Mc Loughlin, G. O'Flanagan, B. Lang, J. Kinsella, C. Timon, P. Lennon

Objective

Little consensus exists regarding optimal surveillance periods for head and neck cancer patients. HPV positive oropharyngeal squamous cell carcinoma has been found to have lower recurrence rates and better prognosis than its HPV negative counterpart. Recent evidence has suggested that majority of recurrences occur within 6 months of treatment and therefore, a shorter surveillance period may be feasible. The aim of our study was to determine the time to disease recurrence in our cohort of patients with HPV positive oropharyngeal SCC.

Methods

This was a single centre retrospective review of patients with HPV positive oropharyngeal SCC treated at a tertiary referral Head and Neck Oncology Centre.

Results

One hundred and fifty-one patients with HPV positive oropharyngeal SCC were included. Of those, 119 (78.8%) were male and 32 (21.2%) female. Mean age was 58.36±10.24 years. Twenty-three patients (15.23%) were found to have disease recurrence over a mean follow-up of 27 months, 12 of these had locoregional recurrence and 11 distant metastases. Median time to recurrence was 10 months (range 3-84 months). Four occurred within the first 6 months of follow up, while 11 occurred between 6 months and 1 year, and 8 more than 1 year following treatment.

Conclusion

The majority of recurrences in our study occurred between 6 months and 1 year following treatment. However, a substantial portion of patients recurred over a year after treatment. We would recommend that patients with HPV positive oropharyngeal SCC should continue to have ongoing surveillance for up to 5 years.

#76 HIGH FREQUENCY HEARING LOSS FOLLOWING PAEDIATRIC MASTOIDECTOMY: IS THIS REVERSIBLE?

S Konstantinidou, SSM Hussain

Objective

In mastoid surgeries ear noise exposure is a known identified factor leading to high-frequency hearing loss due to the wide variety of surgical devices that may be used during the surgery. The aim of this study is to assess if this hearing loss is reversible.

Methods

We obtained data of all the paediatric patients who had mastoid surgery in our hospital between the years 1999 and 2016. The information was gathered from the mastoid audit proformas that were used and included documentation of preoperative, first and last postoperative audiology. In total 61 operations had appropriate documentation. To evaluate the hearing outcomes in high frequencies, we analysed the change in hearing thresholds obtained from pure-tone audiometry at 4000 Hz and 8000Hz.

Results

The mean hearing threshold preoperatively at 4000 Hz was 34.5 dB and at 8000 Hz was 43. dB. In the first and the last audiometry after surgery, the mean hearing threshold at 4000 Hz was 38.4 dB and 36.8 dB respectively, while at 8000 Hz was 46 dB and 38.4 dB. The average time for the first review after surgery was 3.6 months and the last postoperative audiometry was on average in 12.8 months.

Conclusion

This study suggests that the high frequency hearing loss which sometimes occurs after mastoid surgery is reversible. The improvement in hearing threshold is more prominent at 8000 Hz compared to 4000 Hz.

#82 MANAGEMENT OPTIONS FOR DEEP SPACE NECK ABSCESES IN PAEDIATRIC PATIENTS

J Smith, A Kelly, K Trimble

Objective

Deep space neck abscesses in children require a degree of clinical suspicion to facilitate early diagnosis. Surgical drainage may be necessary in some cases but conservative medical management is often effective. We have reviewed the case notes of all deep space neck infections in paediatric patients over a ten-year period to examine patterns in treatment, resolution and follow-up.

Methods

A retrospective review of case notes was undertaken and cross-sectional imaging, microbiology reports, treatment modality and clinical condition were recorded for comparison and analysis. All children under 14 years were included with ICD 682.1 diagnosis. All children with routine neck abscess not involving the deep neck spaces were excluded.

Results

8 patients were identified over a ten-year period. There were 4 retropharyngeal and 4 parapharyngeal abscesses, with an average age of onset of 4 years 11 months. One patient required ICU admission for intubation and ventilation due to severity of symptoms. Blood cultures were negative for all patients, as were throat swabs in all but one. 4 patients were treated conservatively with medical management. Antibiotics therapies included penicillins, cephalosporins and aminoglycosides, based on suspected organisms. All patients were discharged on a regime including a penicillin-based antibiotic. There were no complications recorded in any patient, either in the immediate post-operative period or at first outpatient review.

Conclusion

In conclusion, conservative management of deep space neck abscesses in children should be considered as a viable option. Blood cultures are often negative. Incision and drainage can be avoided in selected paediatric patients.

#84 OPTIMISING USE OF THEATRE RESOURCE: PAEDIATRIC ENT NURSE
DELIVERED PRE-ASSESSMENT AND IN-PATIENT PATHWAY

S Hannigan, D Wilson

Objective

Pre-operative assessment can be defined as a clinical risk assessment where the health of a patient is appraised to ascertain that the person is fit to undergo the anaesthetic for a planned operation. Our aim was to ensure continuity of care for the child and demonstrate low DNA (patients who do not appear) and cancellation episodes on the day of surgery.

Methods

Our ward is an 18 bedded Ear, Nose and Throat (ENT) and Ophthalmic ward with provision for children aged 0-18 years, requiring surgical intervention. The pre-assessment clinic takes place on the ward which helps as part of the familiarization process and is a nurse led service. Pre-assessment involves history taking, an explanation of the care provided on the day of surgery, heart and lung assessment, consent and bloods if necessary. The primary outcome measure was DNA rate on day of surgery. Secondary outcomes measures were patient satisfaction scores.

Results

During the period August 2016 until August 2017, 953 EENT patients were pre-assessed. DNA and cancellation rates on the day of surgery were 1%.

Conclusion

The ward-based pre-assessment service results in very low DNA rates (1%); parents and children are fully informed regarding their surgery. A rapport develops between parents, children and staff as we effectively see them from the start of their care at the out-patient department through to the end of their care at their post-operative out-patient appointment. Theatre resource utilisation is increased.

#86 A FRESH PERSPECTIVE OF ACUTE AIRWAY MANAGEMENT: THE
MULTIDISCIPLINARY SIMULATION WORKSHOP

A.Nae, Byrne D, Gormley P, Lang J, Keogh I, Young O, Callaghan M, Contreras M, M.Thornton

Introduction

Management of the difficult airway is one of the most challenging tasks for healthcare providers, with the potential for a bad outcome in a very short time frame. Preparing for these difficult situations is not straightforward but the role of simulation has proven a valuable asset in this regard. Poor teamwork has been identified as a contributing factor in up to 40% of cases where management failed. The importance of regular rehearsal has been highlighted. Our objective was to develop a multidisciplinary Airway Simulation workshop

Methods

An Airway Simulation Workshop model was developed to include Trainees and Consultants in ENT, Anaesthesia and theatre nursing staff. This was carried out at the beginning of a new group rotation and in our purpose-built Simulation Laboratory at UHG. Three clinical scenarios were developed and a team assigned to each case. Each team included a member of our Theatre nursing staff, a Specialist Registrar in ENT & a Specialist Registrar in Anaesthetics. Supervision was by Consultants in each specialty.

Results

Individual roles of team members were clearly identified by all during the course of this event. The importance of team work and communication was evident. Open review of each case clarified important steps within the pathway for management which could be appreciated by all involved. Open discussion forum after each scenario allowed identification of key learning objectives and essential steps in difficult airway management. Communication between Anaesthetist, ENT Surgeon and nurses created a safe environment that improved patient's outcome. Trainee feedback indicated this teaching opportunity prepared them for such situations. Control over the case was taken by both trainees at different stages in the scenarios. An increase in demand for more simulation training was noted.

Conclusion

Simulation based training in difficult airway scenarios offers trainees a safe learning environment, without the morbidities and potential complications of real life. It is imperative to involve multiple specialties and assemble the full team of personnel to realistically recreate the real-life situation. Regular workshops now planned throughout the year will allow for continued rehearsal in the event of the acute situation and hopefully will positively impact on the management of such cases in the future.

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List of Exhibitors

Thank you to our 2018 sponsors who have supported the meeting and provided access to state-of-the-art devices and pharmaceuticals to help us manage ENT patients. Please take advantage of their expert advice and visit their exhibition stands. Brendan Hanna will announce a raffle winner selected from delegates who have 16 stickers filled on their prize draw cards by Saturday morning.



Hear now. And always



Index of images

Front cover

Sir William Robert Wills Wilde MD, FRCSI, (March 1815 – 19 April 1876) inset into Giant's Causeway hexagonal basalt column, County Antrim.

Back cover

Galgorm Resort Hotel. 18th Century country house in 163 acres parkland overlooking River Maine in County Antrim.