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National Institute of Health Sciences
St. Camillus'Hospital
Shelbourne Road
Limerick

t: 061-483975
f: 061-483974
e: info@nihs.ie
w: www.nihs.ie

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Foreword

This issue coincides with news of significant change in the delivery system. The future triad of the Health Services Executive, the restructured Department of Health & Children and the Health Information and Quality Authority will no doubt impact on the way we perform. We have a particular interest in the role of HIQA as an enabler, influencer, regulator and promoter of evidence based practice based on high quality research data and information. Current initiatives in Research and Development will bear fruit in due course. The academic-practitioner links are vital in this regard and will be sustained by enhancing the relationship through common endeavour.

I gratefully acknowledge and appreciate the extra effort of practitioners who demonstrate reflexivity and reflection in action. These contributions are indicative of the calibre of our staff and add to our store of knowledge and best practice.

I am indebted to our editorial team Professor Pierce Grace, Mr John Fenton, Mr Pat Brosnan and Mr Aidan Hickey for their valued work in ensuring the success of this publication.

Stiofán de Búrca Ph.D.
Príomh Oifigeach Feidhmeacháin

Editorial

This issue of the NIHS Research Bulletin once again brings to our attention the wealth of research activity, from across a broad spectrum of healthcare arenas. Such energy and enthusiasm for new knowledge underpins the buoyant research culture of this region. The efforts of all contributors are gratefully acknowledged.

Previous editorials have commented on the responsibility of healthcare professionals to become contributors to the knowledge base, primarily through enquiry-led learning and research activities. The desired target outcomes of such activities would ultimately lead towards improved patient care and advanced policy formulation.

Policy and patient care are continually evolving and healthcare professionals over the years have been generally well disposed to the management of new knowledge by discarding ineffective interventions and adopting effective ones. However, it is important to maintain vigilance and adherence to best practices, especially in light of the current economic circumstances, and steer clear of certain characteristics, which may appear at certain instances, the easier option but could inadvertently lead to a significant decline in the calibre of healthcare service provision. Such characteristics might include:

- Adoption of interventions of unproven efficacy or even proven ineffectiveness
- Failure to adopt interventions that do more good than harm at a reasonable cost
- Continuing to offer services, demonstrated to be ineffective
- Adoption of services without appropriate preparation for translation from research to practice

Coupled with the pressures of an evolving administrative system, an ageing population and rising consumer expectations, it is imperative that the management of new knowledge be kept in balance and maintained at the highest levels, at all times.

Aidan J. Hickey
Director
National Institute of Health Sciences

Title

A Prospective Double Blind Randomised Placebo-Controlled Comparison of Two Premedication Regimens in Older People Undergoing Fibreoptic Bronchoscopy

Authors

Watts, M., Moore, A., Geraghty, R., Saunders, J., Swift, C.G.
Clinical Age Assessment Unit, Mid-Western Regional Hospital, Limerick

Introduction

With demographic changes and current epidemiology in developed countries, the highest proportion of patients requiring flexible fibre-optic bronchoscopy is elderly. Sedation prior to bronchoscopy should be offered to both improve patient comfort, and make the procedure easier for the bronchoscopist.
The most commonly used sedatives are the benzodiazepines and opioids. Older patients exhibit increased sensitivity to some centrally acting drugs, which may alter the risk-benefit ratio of premedication regimens. A perceived increase in risk may be used to justify restricting access to this important investigation on the grounds of age.

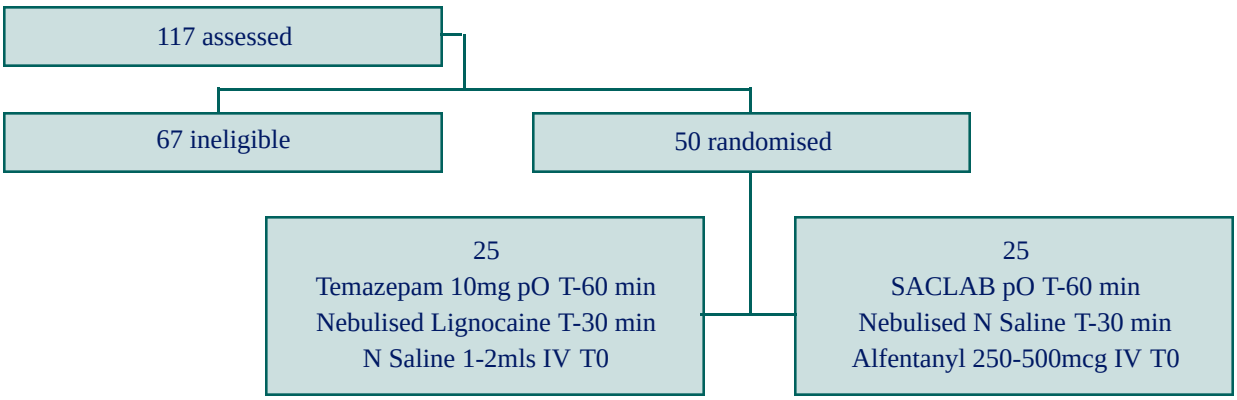
There have, however, been no previously published prospective placebo-controlled studies specifically in older patients to determine the merits of new or established regimens.

We decided to compare an established premedication of intravenous alfentanyl (normal treatment) with a new regimen of oral temazepam plus nebulised lignocaine (new treatment).

Methodology

Consecutive patients 75 years and older referred to the bronchoscopy list of the primary investigator (MW) were considered for entry into this randomised prospective double blind placebo controlled comparison. Twenty five eligible patients were randomly assigned to each group. (See Table 1).

Table 1 - Trial Profile



The primary outcome measure was the lowest oxygen saturation recorded from the administration of IV drugs and for 30 minutes post bronchoscopy.

Results

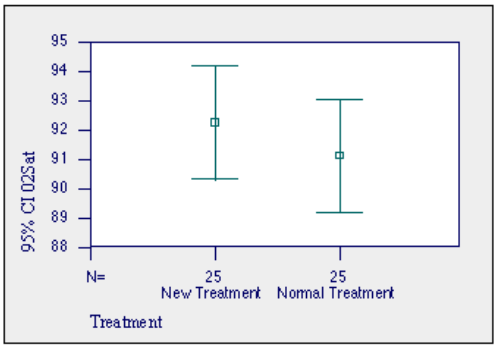
Findings at bronchoscopy were similar in each group. (See Table 2).

Table 2 - Findings at Bronchoscopy

Diagnostic Categories	New Treatment (temazepam plus nebulised lignocaine)	Normal Treatment (alfentanyl)
Bronchogenic carcinoma (total)	**11**	**10**
Squamous cell	8	5
Adenocarcinoma	2	4
Small cell	1	1
Infection (total)	**2**	**3**
Tuberculosis	1	1
Other	1	2
Other	**4**	**3**
Telangectasia	1	0
Extrinsic compression	3	3
Normal	**8**	**9**

The lowest mean oxygen saturation in the new treatment group was 92.2% (95% CI 90.3-94.2), and in the normal treatment group 91.1% (95% CI 89.2-93.1).

Figure 1 - Lowest Oxygen Saturation (%)



This was not statistically significant (P=.370). There were no procedure-related adverse events in any patient.

Conclusion

This is the largest prospective study to date on an older population undergoing bronchoscopy. Determined by oxygen saturation there is no difference in safety between premedication regimens comprising oral temazepam/nebulised lignocaine or intravenous alfentanyl. The study is consistent with previous evidence that bronchoscopy is a safe procedure in older patients and points to the need for, and feasibility of, further prospective studies in this age group.

Presented

At the Irish Geriatrics Society Meeting in Tallaght Hospital, Dublin, 26-27 September, 2003 by Dr. M. Watts.
Also, at the British Geriatrics Society Meeting in Hammersmith, London, 15-17 October, 2003 by Dr. M. Watts.

References

Available on request.

Title

A Comparison of the Effect of Two Premedication Regimens on Cough Indices and Dose of Topical Lignocaine Required in Older People Undergoing Fibre Optic Bronchoscopy

Authors

Watts, M., Moore, A., Geraghty, R., Saunders, J., Swift, C.G.
Clinical Age Assessment Unit, Mid-Western Regional Hospital, Limerick

Introduction

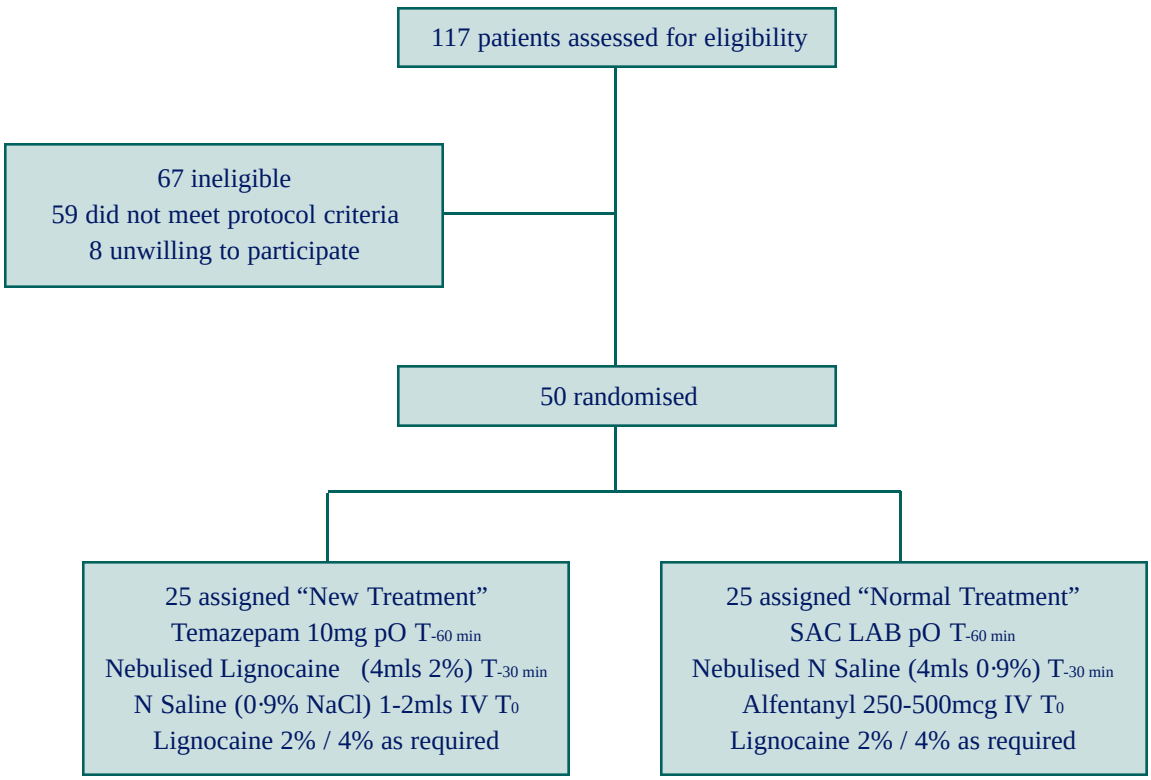
Older patients commonly require fibreoptic bronchoscopy. Lignocaine, administered during the procedure, is the most commonly used topical anaesthetic, used primarily to reduce cough, an uncomfortable experience for patients and technically compromising for the bronchoscopist. A total dose less than 8.2 mg/kg is recommended by the BTS, with extra caution in the elderly. Intravenous alfentanyl is a common premedication. We studied the effect of two premedication regimens on the total dose of topical lignocaine required and cough indices.

Methodology

The study was carried out in three centres. Ethics committee approval was obtained. Consecutive patients 75 years and older referred for bronchoscopy were considered for entry into this randomised prospective double blind placebo controlled comparison. All patients had a full history and physical examination as well as a review of the case notes. Patients were excluded if taking any benzodiazepine or opioid, as were patients with resting oxygen saturations of less than 90% on room air and an abbreviated Mental Test Score of less than 7/10.

25 patients received 10mg po temazepam T- 60 min, 4ml 2% nebulised lignocaine T- 30 min and 1-2mls N saline IV at T_0 (New Treatment). 25 patients received SAC LAB po T-60 min, nebulised N saline T-30 minutes and 250-500mcg alfentanyl IV at T_0 (Control group). (See Figure 1). The total dose of lignocaine used was recorded. The bronchoscopy was recorded with an audiotape, and cough indices calculated.

Figure 1 - Trial Profile



Results

Table 1 - Results

Variable	New Treatment	Control	P
Total lignocaine (mg) (median)	294	472	0.0005
Cough index (median)	4	10	<0.0005

Conclusion

Compared to an established premedication with intravenous alfentanyl, temazepam and nebulised lignocaine prior to bronchoscopy reduces the total dose of topical lignocaine required in older patients undergoing bronchoscopy and reduces cough. As topical lignocaine is absorbed into the systemic circulation, this may be clinically important in preventing adverse events.

Presented

At the Irish Geriatrics Society Meeting in Tallaght Hospital, Dublin, 26-27 September, 2003 by Dr. M. Watts.
Also, at the British Geriatrics Society Meeting in Hammersmith, London, 15-17 October, 2003 by Dr. M. Watts.

References

Available on request.

Title

Carotid Intima-Media Thickness in Stroke Subtypes

Authors

Walsh T., O'Riordan R., Clinch D., Watts M., Lyons D.
Stroke Unit, St. Camillus Hospital, Limerick
Clinical Age Assessment Unit, Mid-Western Regional Hospital, Limerick
University of Limerick

Introduction

Carotid Intima-Media Thickness (CIMT) is a powerful predictor of future vascular risk. It may reflect blood pressure load exposure over time. The aim of this study was to determine if an association exists between CIMT and individual stroke subtypes.

Methodology

A cross-sectional study of 61 successive Stroke Unit patients was performed. Stroke subtypes were determined using the Oxford Community Stroke Project Classification. Haemorrhagic and Unclear Strokes were excluded (n =12). CIMT was measured using B-mode ultrasound (Siemens Sonoline-Omnia) by a single-blinded observer. Blood pressure was measured using a Space-Lab Ambulatory Blood Pressure Monitor.

Results

Thirty male and nineteen female patients were studied. The mean age was 75.14 years (range 56-91). The mean (SD) CIMT (mm) for each infarct subtype was partial anterior circulatory infarct 0.9028 (0.27293), total anterior circulatory infarct 0.9115 (0.18275), lacunar infarct 0.9954 (0.21808) and posterior circulatory infarct 0.8320 (0.17065).

ANOVA revealed no differences in CIMT between the stroke subtypes ($p = 0.544$). The differences in means of systolic blood pressure (SBP), diastolic blood pressure (DBP), pulse pressure (PP) and mean blood pressure (MBP) between the stroke subgroups were not significant. There was a trend, however, towards higher mean CIMT, SBP, PP and MBP in the lacunar group.

Conclusion

While no significant differences were found, trends towards higher CIMT, SBP, PP, and MBP were observed in lacunar group. This may point to a role for altered large vessel compliance in lacunar stroke pathogenesis. The current data should be expanded to conclusively address this possibility.

References

Available on request.

Title

The Use of Fingernail in the Assessment of Bone Health: A Pilot Study

Authors

Pillay, I.,[1] Lyons, D.,[1] Chowdhury, S.,[2] German, M.J.,[3] Lawson, N.S.,[4] Pollock, H.M.,[4] Saunders, J.,[5] Moran, P.,[6] Towler, M.R.[6]
[1]Clinical Age Assessment Unit, Mid-Western Regional Hospital, Limerick, Ireland
[2]Materials & Surface Science Institute, University of Limerick, Ireland
[3]Department of Biological Sciences, University of Lancaster, UK
[4]Department of Physics, University of Lancaster, UK
[5]Manager, Statistical Consulting Unit, University of Limerick, Ireland
[6]Mechanical & Aeronautical Engineering Department, University of Limerick, Ireland

Introduction

There is anecdotal evidence that increasing hardness of fingernails occurs in patients within months of starting treatment for osteoporosis. As the properties of both nail and bone may be linked in a comparable, measurable way, we examined the nails of two groups of patients, those with and those without osteoporosis.

Methodology

Bone mineral density was assessed using Dual Energy X-ray Absorptiometry (DEXA) scanning (Lunar Prodigy, GE Medical systems). Nail samples from nine osteoporotic and thirteen non-osteoporotic patients were collected on which modulus and hardness were measured by nanoindentation. Nanoindentation was performed using a laboratory-built machine previously described by Arteaga *et al.* Disulphide bond content of five nail samples from each group was measured by Raman spectroscopy using a Dilor Labram 01 instrument.

Results

The mean difference in mean modulus between the groups was 0.996 but this was not significant at the 5% level ($p=0.147$). The spectroscopy data also showed differences between the two sets of nails. The disulphide bond content of the nails sourced from osteoporotic patients was much lower than those from healthy patients. There was also a significant shift in carbon sulphide bond detection. The numbers were too small to allow a statistical comparison.

Discussion

We hypothesise that whilst bone collagen and nail keratin are two distinct structural proteins, they share the need for protein sulphation and disulphide bond formation, via cysteine, for their structural integrity. A disorder of either process may lead to disordered collagen and keratin synthesis. This would be reflected in the structural abnormalities seen in clinical syndromes in which there is either protein deficiency or disorders of sulphur metabolism.

Conclusion

This is the first study to compare hardness, modulus and disulphide bond content of nail with bone mineral density as measured by DEXA. The p value for nail modulus between groups is quite low and indicates that a significant difference might be found if a further study is undertaken which is sufficiently powered. The spectroscopy results are encouraging and demand further study in a larger sample.

We conclude that the relationship between nail and bone may exist in a measurable way. If this is true it will add a new dimension to the aetiology of osteoporosis. Moreover, nail may prove to be a valuable adjunct to diagnosis and in some patients, a means of follow-up after commencement of therapy.

Title

Referral Patterns to DEXA Scanning Service - Five-Year Follow Up Data

Authors

Pillay, I.,[1] O'Riordan, J.,[1] Costelloe, A.,[1] Sheehy, T.,[1] Lyons, D. [1,2]
Clinical Age Assessment Unit, Mid Western Regional Hospital, Limerick [1]
University of Limerick [2]

Introduction

DEXAis the gold standard technique for the diagnosis of osteoporosis. The technique is becoming more widely available and is an important tool in the characterisation of age associated bone disease. DEXAunits are being run by an increasing number of Medicine for Elderly Departments.

Methodology

We present data from a longitudinal study performed over a five-year period (1998 – 2003). The DEXA database (Filemaker Pro 5.5) at the Clinical Age Assessment Unit was interrogated to specifically assess referral patterns for this diagnostic test. All scans were performed by one of two specialist nurses on either a Lunar DPX Pro or GE Lunar Prodigy machine. Referrals are taken from primary care or secondary care doctors.

Results

The results of 6,579 successive, initial DEXA scans were analysed. Outpatient referrals accounted for 6,184 (94%) of all referrals. Women accounted for 5,658 (91%). 1,513 (23%) and 2,523 (38%) scans produced diagnoses of osteoporosis and osteopaenia respectively. The point prevalence rate of osteoporosis amongst public patients was twice as high as private patients (33% V 15%). The age profile of scanned patients is tabulated here. (See Table 1).

Table 1 - Age Profile of Scanned Patients

0-25 years	26-45 years	46-65 years	66-85 years	86-100 years
107 (1.7%)	598 (9.5%)	3,585 (57.1%)	1,870 (30%)	106 (1.7%)

The highest referring specialties for DEXAwere Obstetrics and Gynaecology, Medicine for the Elderly and Nephrology.

Conclusion

More than 60% of those scanned had significant reductions in bone mineral density. Far fewer men are referred for DEXAthan one would predict based on the known prevalence of the disease in men. There is some evidence that self-selection for DEXAscanning takes place and is influenced by socio-economic status. Considerable education is needed to raise the awareness of osteoporosis diagnosis amongst specialties that are high steroid users.

Presented

At the Irish Gerontology Society Meeting in Tallaght Hospital, Dublin, on 26th September, 2003 by Dr. I. Pillay.

Title

Treatment of Vasodepressor Carotid Sinus Syndrome with Midodrine: A Randomised Controlled Trial

Authors

Moore, A.,[1] Watts, M.,[1] Harnett, A.,[2] Sheehy, T.,[1] Stack, L.,[1] Costelloe, A.,[1] Clinch, D.,[1] Lyons, D.[1]
Clinical Age Assessment Unit, Mid-Western Regional Hospital, Limerick[1]
Pharmacy, Mid-Western Regional Hospital, Limerick[2]

Introduction

The carotid sinus syndrome (CSS) is an increasingly recognized cause of syncope in older people (McIntosh, S. et al., Age Ageing 1993; 22:53-58). Treatment of the vasodepressor form of CSS is not well established however.

Methodology

We performed a crossover prospective double-blind randomised controlled trial in which patients with a 50mmHg systolic blood pressure (SBP) decrease after carotid sinus massage (CSM) were randomized to receive either midodrine 10mg TDS or placebo for two-week treatment periods with a one-week washout between treatment phases. BP changes produced by CSM were evaluated by digital artery photoplethysmography (Finometer, FMF Medical Instruments, Amsterdam). Patients had 24-hour ambulatory BPmonitoring at trial entry and during each treatment phase. Differences between groups were assessed with Chi Square analysis (symptom) and t tests (SBP decrease).

Results

10 patients (4M, 6F mean age 75) were studied. 8 had symptoms during initial CSM. The initial mean SBPdecrease after CSM was 54mmHg (s.d 22mmHg). Initial mean 24-hour ambulatory BP was 127/70mmHg (s.d. 7/5mmhg). 8 patients had symptoms after CSM at the end of placebo phase, mean SBP decrease 49mmHg (s.d. 9mmHg), mean 24-hour ambulatory BP 127/69 (s.d. 9/7mmHg). One patient was symptomatic after CSM during active treatment phase, mean SBPdecrease after CSM 37mmHg (12mmHg), mean 24-hour ambulatory BP133/75mmHg (7/6mmHg). The differences between active and placebo phases in symptom reporting and mean SBP decrease were significant ($p<0.01$ and $p=0.03$ respectively).

Conclusion

Midodrine reduced the rate of symptom reporting and mean SBP decreases after CSM but increased 24-hour mean ambulatory BP.

Title

Popliteal-to-Distal Artery Bypass to Salvage the Diabetic Limb

Authors

Brannigan A.E.,[2] Tubassum, M.,[2] Grace, P.A.,[2] Burke, P.E.[1]
St. John's Hospital, Limerick[1]
Department of Vascular Surgery, Mid-Western Regional Hospital, Limerick[2]

Introduction

Vascular disease, infection and neuropathy act synergistically in diabetics to cause foot ulceration leading to a significantly higher incidence of limb loss compared with the general population. Revascularisation using femoral-infragenicular and femoral-inframalleolar bypasses are often lengthy procedures in a very high risk patient population. Poor long-term survival and significant co-morbidity among diabetic patients means that the shortest, simplest revascularisation procedure that restores limb perfusion is desirable.

Rationale

The aim of this study was to evaluate limb salvage, primary graft patency and peri-operative morbidity rates in elderly diabetic patients undergoing popliteal to distal artery bypass for critical limb ischaemia.

Methodology

Patients undergoing popliteal-to-distal artery bypass for critical limb ischaemia from January 1994 to May 2001 were identified using the hospital inpatient enquiry system (HIPE) and from Staff operative logbooks. Patient demographic, operative and follow-up data were entered into a database.

Results

During the study period 21 consecutive bypasses were performed on 19 patients. The median age was 70 years (Range 61 to 80 years), male to female ratio was 16:3. Procedures were performed for category 5 ischaemia. All patients were diabetic, of whom 74% were insulin dependent, and 84 % had a history of ischaemic heart disease. A reversed vein graft was used in all patients. Proximal inflow was via the above knee popliteal artery (n=-4), the below knee popliteal artery (n=16) and a previous fem-popliteal bypass graft in (n=1). Distal anastomosis was to the posterior tibial artery above the ankle (n=6), the dorsalis pedis artery (n=5), the anterior tibial artery above the ankle (n=6) and the peroneal artery (n=4). Thirteen patients received Aspirin post-operatively and 6 recommenced pre-operative Warfarin. The peri-operative mortality rate was 4.6%. Primary graft patency rates among surviving patients were 96%, 92% and 88% at 1, 2 and 6 years respectively.

Conclusion

Popliteal-distal artery bypass is a favourable revascularisation procedure in high risk diabetic patients with critical limb ischaemia.

Title

Retrospective Audit of the Timing of Laparoscopic Cholecystectomy in Acute Cholecystitis

Authors

Cheema, S.,[1] Brannigan, A.E.,[1] Johnson, S.,[2] Delaney,P.V.,[1] Grace,P.A.[1]
Department of Vascular Surgery, Mid-Western Regional Hospital, Limerick[1]
The National Institute for Health Science and Management, University of Limerick[2]

Introduction

Laparoscopic cholecystectomy is the treatment of choice for symptomatic gallstones but is associated with an increased conversion rate in acute cholecystitis. The aim of this study was to review the operative management of symptomatic cholelithiasis over a 5-year period with particular reference to conversion rates and morbidity associated with laparoscopic cholecystectomy for acute cholecystitis.

Methodology

Patients undergoing cholecystectomy between January 1994 and December 1998 were included. Data regarding demographic details, diagnosis, duration of symptoms, treatment, outcome, postoperative stay and complications were retrospectively recorded.

Results

Complete data was available on 482 patients (84%). Laparoscopic cholecystectomy was attempted in 120 of 132 patients (91%) with acute cholecystitis and 329 of 350 patients (94%) with non-acute gallbladder disease. Conversion rates were 27% (33/120) and 6.7% (22/329) for acute and non-acute gallbladder disease, respectively ($P<0.001$ X^2 test). In relation to the time interval from onset of symptoms to surgery, conversion rates for acute cholecystitis were: < 3 days, 5/17 (29%); 4 to 42 days, 14/59 (23%) and > 42 days, 14/44 (31%). There were three bile duct injuries, two in the delayed (>45 days) acute group and one in the non-acute group.

Conclusion

Cholecystectomy for acute cholecystitis is associated with a high conversion which is independent of the timing of surgery. We conclude that early laparoscopic cholecystectomy is the treatment of choice for acute cholecystitis.

Title

Health-Related Quality of Life During Four Layer Compression Bandaging for Venous Ulcer Disease: A Randomised Controlled Trial

Authors

Clarke Moloney, M.,[2] O'Brien, J.F.,[2] Grace, P.A.[2], Burke, P.E.[1]
Department of Vascular Surgery, St. John's Hospital, Limerick[1]
Department of Vascular Surgery, Mid-Western Regional Hospital, Limerick[2]

Introduction and Rationale

Leg ulcers are a common and debilitating problem with a prevalence in Ireland of 0.12% overall, increasing to 1.03% in patients over 70 years of age. Eighty one percent of leg ulcers are venous in origin, resulting from venous hypertension. The application of graduated compression bandaging is the most widely recognised treatment for venous leg ulcers. 50-70% of ulcers heal at 12 weeks with this treatment.

Venous leg ulceration is a chronic condition which can result in pain, limit mobility, alter body image and lower self-esteem, all of which negatively impact on patient's quality of life. Therefore, when choosing treatment for a patient with venous ulceration it is imperative that treatment not only accelerates healing but also improves quality of life.
The aim of this study was to compare the effects of four-layer compression bandaging (4LB) for treating venous leg ulcers with other available treatments on health-related quality of life *during* treatment.

Methodology

In this pragmatic trial, 200 patients with a venous leg ulcer were randomised either to 4LB (intervention group; n=100) or to continue their usual system of care (control group; n=100). The follow-up period for each patient was 12 weeks. Analysis was by intention to treat; quality of life measurements were taken at randomisation and after six weeks of treatment. The quality of life questionnaires used were the disease specific CIVIQ and the generic SF-36. The outcome measure examined was change in health-related quality of life status, as perceived by patients during treatment.

Results

The CIVIQ showed the most discernible clinical and statistically significant differences in perceived health status at six weeks, in preference to 4LB, most especially in the domains of physical activity and social functioning. There was a significant improvement in physical activity in the 4LB group with a median improvement of 18.7 after six weeks (31.25 vs 18.2), no difference was detected in the control group (p=0.006, 4LB vs control). In the social functioning domain both groups baseline analysis were identical, again the greatest improvement after six weeks treatment was seen in the 4LB group, median improvement of 16.7 (50 vs 33.3) in 4LB and 8.3 (50 vs 41.7) in the control group (p=0.001,4LB vs control). The SF-36 also displayed greater improvements in health benefits using 4LB. The most significant improvement after six weeks treatment was again seen in the area of physical function, the median improvement in the 4LB group was 15 (55 vs 70) whereas the control group showed a slight deterioration of 2.5 (52.5 vs 50)(p= 0.001, 4LB vs control).

Conclusion

Four-layer bandaging significantly improves the quality of life of patients during treatment for leg ulceration, particularly in the area of physical activity and social functioning.

Presented

At the Ulster Surgical Club Meeting, Sylvester O'Halloran Post-Graduate and Medical Centre, Mid-Western Regional Hospital, Limerick on May 1st, 2003 by Ms. Mary Clarke-Moloney.

Title

Extended Uses of the Holmium: YAG Laser in Urology

Authors

O'Sullivan O., Clyne O., Flood H., Drumm J.
Department of Urology, Mid-Western Regional Hospital, Limerick

Introduction

The Holmium: YAG was first used in urology in the 1980's. Most commonly the laser is used to treat superficial lesions, stones and to perform prostatectomy.

Objective

The aim of our study was to audit our use of the Holmium: YAG laser. It was first used in our department in May 2001, with a six month delay due to safety regulations.

Methodology and Results

Overall in an eighteen month period, we performed 74 procedures on sixty two patients (See Table 1). The age ranged from 2 to 93 years. Fragmentation of stones comprised 60 (81%) of the cases. In a further 10 (14%) of cases we treated mucosal lesions. 2 (2.5%) of cases were for removal intravesical foreign bodies. The remaining 2 (2.5%) combined stricturotomy with stone fragmentation. (See Table 1).

Table 1 - Procedures performed with Holmium: YAG laser.

Procedure		Number
Stones		
	Kidney	10
	Ureteric	45
	Bladder	4
	Urethral	1
Tumours		
Benign	Renal pelvis polyp	1
Malignant	Ureteric TCC	4
	Bladder TCC	4
	Urethral TCC	1
Foreign Body Removal		
	TVT	1
	Stamey sutures	1
Combined stone/stricturotomy		
	Infundibulotomy	1
	Ureterotomy	1

Conclusion

We have shown that endoscopic Holmium: YAG laser indications extend beyond simple stone fragmentation and can provide an elegant minimal-invasive therapy for many less common urological problems.

Presented

At the Irish Society of Urologists Annual Meeting in Killarney, Co. Kerry on October 10th and 11th, 2003 by Ms. Orfhlaith O'Sullivan.

Title

V-Stat – The Perfect Vaginal Pack?

Authors

O'Sullivan O., Bannon C., Clyne O., Flood H.
Department of Urology, Mid-Western Regional Hospital, Limerick

Introduction

Vaginal packing is a standard procedure to control/prevent bleeding after vaginal surgery.

Objective

We designed a simple vaginal balloon pack (V-stat) with the objective of providing an easy-to-insert/remove variable volume tamponade device. This was a pilot study to assess the benefits of V-Stat over the traditional gauze roll.

Methodology

43 women were recruited in a randomised controlled trial as follows:
A: 22 patients = gauze roll group
B: 21 patients = V-stat group
The groups were well matched for age and procedure. Time of removal was similar in both groups. All patients and nurses were asked to complete a visual analogue score concerning the ease of removal and the discomfort caused. We also recorded the length of time it took to remove the devices and the number of nurses required.

Results

38 completed the study, 22 in group A and 13 in group B. The v-stat was extruded in 3 cases. The VAS scores were measured in both groups and the results compared using anova (See Table 1). The results found that the gynae gauze roll caused significantly more discomfort. In 5 patients the V-stat was also used successfully for intra-operative tamponade of heavy bleeding.

Table 1(A) - Comparing patient VAS using anova

Group	Total	Patient VAS Mean value	Patient VAS Range
A	22	41.77	1-99
B	13	17.21* p=0.016	1-51

*= significantly different

Table 1(B) - Comparing nurse VAS using anova

Group	Total	Nurse VAS Mean value	NurseVAS Range
A	22	29.82	5-82
B	13	16.00 p=0.09	1-83

Conclusion

We have shown that this device is significantly more comfortable for patients, is convenient to insert and remove and has a role in control of acute vaginal haemorrhage. Balloon displacement in patients with poor perineum remains a problem.

Presented

At the Irish Society of Urologists Annual Meeting in Killarney, Co. Kerry on October 10th and 11th, 2003 by Mr. Hugh Flood.

Title

The Snodgrass Repair: Is Stenting Really Necessary?

Authors

O'Sullivan, O., Bannon, C.A., Clyne, O., Flood, H.
Department of Urology, Mid-Western Regional Hospital, Limerick

Objective

The aim of our study was to evaluate the need for stenting following the Snodgrass repair.

Methodology

In total sixty-five boys underwent hypospadias repair between April 1996 and July 2001. A variety of techniques were employed. The Snodgrass repair was performed in 39 patients, MAGPI in 18, glanular approximation procedure in 4, Mathieu procedure in 3 and one Duckett onlay-flap. Twenty-two Snodgrass repairs were unstented and 17 were stented for one week postoperatively. Follow-up at six weeks and one year or when toilet trained was carried out on all patients. Fisher's exact test was used to analyse the difference in fistula rate after distal Snodgrass repair with or without stenting. Patient age at the time of surgery ranged from 8-115 months, with a median of 21 months. Postoperative complications included 1 stent migration, 1 urethral diverticulum and 4 fistulas. In one patient the ventral skin on one side sloughed away. This was debrided and allowed to close by secondary intention.

Results

The fistula rate for the entire group was 6%, with an incidence of 10.5% in patients undergoing Snodgrass repair. In cases having Snodgrass repair for meatal position other than mid or proximal shaft there was no significant difference in the fistula rate whether or not a stent was used ($p=0.7$). The long-term follow-up of the entire group indicates that 5 patients developed meatal stenosis, 3 in stented Snodgrass repairs, one following MAGPI and one following GAP repair. Otherwise the long-term outcome of the surgery has been excellent for the entire group.

Conclusion

Therefore we conclude that urethral stenting is not essential in distal Snodgrass repair.

Presented

At the Irish Society of Urologists Annual Meeting in Killarney, Co. Kerry on October 10th and 11th, 2003 by Ms. Orfhlaith O'Sullivan.

Title

A Review of Hospital Re-admission with Post-Tonsillectomy Haemorrhage

Authors

Ullah , I., Keogh, P.F., Manning, K.P., Fenton, J.E.
Department of Ear, Nose and Throat and Head and Neck Surgery, Mid-Western Regional Hospital, Limerick

Introduction

Secondary bleeding is a significant complication of the tonsillectomy that is generally unpredictable and not preventable. Identification of factors that can help to prevent or to predict this potentially life threatening situation would greatly assist clinical practice.

Rationale

The aim of this study was to assess patients admitted to the Mid Western Regional Hospital with post-tonsillectomy haemorrhage and to analyse the findings.

Methodology

A retrospective chart review of 15 patients admitted to our department with bleeding following tonsillectomy and adenotonsillectomy between January and December 2002. Data on patient demographics, preoperative clinical parameters, operative method of tonsillectomy and postoperative findings including pain relief were recorded. A cost analysis was performed.

Results

There were 671 tonsillectomies performed at the department during the study period. Nine of the patients had their original surgery performed at our unit with a NCHD: Consultant ratio 4:3. All had a dissection method and there was no difference in haemostatic techniques. There were no children in the series and most admissions were during the second quarter of the year. Non-steroidal anti-inflammatory analgesia was used in all cases. There was insufficient data available on the six patients who had their tonsillectomy performed outside the region. Three patients required operative intervention to manage the bleeding. The total cost of re-admission for all patients was estimated to be €51,000.

Conclusion

It was not possible to identify predictive or preventative factors for this postoperative complication which conveys a significant morbidity to the patient and a notable expense to the institution. A complication rate of 1.4% compares favourably with units worldwide.

Presented

At the Royal Academy of Medicine in Ireland (Otolaryngology Section) in Westport, Co. Mayo on April 5th, 2003 by Mr. I. Ullah.

Title

A Study of Non-Attendance Rate at the ENT/HNS Clinics at the Mid-Western Regional Hospital

Authors

Shaikh, M.A., Keogh, P.F., Manning, K.P., Fenton, J.E.
Department of Ear, Nose and Throat and Head and Neck Surgery, Mid-Western Regional Hospital, Limerick

Introduction

Non-attendance at outpatient clinics is universal, expensive for the hospital and potentially dangerous for the patient. A high rate of non-attendance reduces the efficiency of the clinic system, leads to long waiting times and wastes health resources.

Rationale

The aim of this study was establish the non-attendance rates at the Department of ENT/HNS and to attempt to identify the contributory factors.

Methodology

A prospective study of six outpatient clinics of three consultants was performed during a 10-month period between June 2002 and March 2003. Only 'no show' patients were assessed and patients that cancelled before the relevant clinic were not included. The number of non-attenders for each clinic was expressed as a percentage of the total number of patients listed for that outpatients clinic. A subgroup of 20% of non-attenders at each clinic was randomly selected and a telephone survey of this group was performed to assess the reasons for non-attendance.

Results

The number of non-attenders was 1,344 from a total of 5,976 booked for the study period. The most common reasons provided in decreasing order of frequency were:

- A forgotten appointment
- Did not receive an appointment
- Symptoms had improved
- Unavailable transport.

Conclusion

The rate for non-attendance at ENT/HNS outpatient clinics at this department was 22.48%. Poor reciprocal communication between the hospital and patient appears to be the most important reason for this rate of non-attendance.

Presented

At the Royal Academy of Medicine in Ireland (Otolaryngology Section) in Westport, Co. Mayo on April 5th, 2003 by Mr. M. Shaikh.

Title

Epidemiology of Mandibular Fractures: A Five-Year Review

Authors

Barry, C., Kearns, G.
Department of Oral and Maxillofacial Surgery, Mid-Western Regional Hospital, Limerick

Introduction

To examine the epidemiology of mandibular fractures presenting to a Regional Maxillofacial unit.

Methodology

This is a retrospective review of patients with mandibular fractures (MF) treated at the Mid-Western Regional Hospital Limerick (MWRH) between January 1998 and January 2003. The aetiology, site of MF, length of hospital stay (HS) and length of follow-up (LFU) were recorded.

Results

The study population included 206 patients (184 males and 22 females), with 327 fractures. The mean age was 24.8 (7-83) years. The presentation of MF showed two peaks in incidence:

- July 12% (n=24)
- December 16% (n=32)

Aetiology was as follows:

- Assault 52% (n= 107)
- Sports injuries 21% (n= 44)
- Motor vehicle accidents 13% (n= 26)
- Falls 13% (n=26)
- Occupational 1.5% (n=3)

Patients admitted alcohol intake at the time of injury in 48% (n=99) of all cases and in 77% (n=82) of assaults.
102 (49%) patients had single and 104 (51%) had multiple fractures.

Fracture sites were as follows:

- Angle 36.2% (n=118)
- Condyle 21.5% (n=70)
- Parasymphysis 18.1% (n= 59)
- Body 15% (n=49)
- Symphysis 6.7% (n=22)
- Ramus 2.5% (n=8)

The fracture pattern for assaults was different:

- Angle 63.5% (n=68)
- Parasymphysis 28% (n=30)
- Condyle 25.2% (n=27)
- Body 22.4% (n=24)
- Ramus 7.5% (n=8)
- Symphysis 5.6% (n=6)

HS was 6.5 (2 - 48) days of which 2.1 (0 - 16) were preoperative and 3.2 (0 - 29) postoperative. LFU was 26.8 (1 - 200) weeks.

Conclusions

Alcohol associated assaults account for almost 50% of patients presenting with mandibular fractures requiring operative intervention and inpatient hospitalization. This results in a significant financial resource implication for the health service.

Presented

At the International Association of Dental Research in Gotenberg, Sweden on June 20th, 2003 by Dr. C. Barry.

Title

Isolated Mandibular Angle Fractures, (MAF): A Five-Year Retrospective Study

Authors

Barry C., Kearns, G.
Department of Oral and Maxillofacial Surgery, Mid-Western Regional Hospital, Limerick

Introduction

The management of MAF is associated with a high complication rate. The purpose of this study is to evaluate the outcomes for patients with MAF treated by open reduction and manipulate fixation (ORIF).

Methodology

This is a retrospective study of patients presenting to Limerick Regional Hospital (LRH) with isolated MAF, from January 1998 to January 2003. Patients with concomitant maxillofacial fractures or those with MAF treated with closed reduction or open reduction via an extraoral approach were excluded. The following treatment protocol was used: arch bar placement, exposure of fracture site, 2.0 mm miniplate adapted to the superior border, wisdom tooth removal unless completely covered by bone, guiding elastics used as necessary to achieve an ideal occlusion. Fracture aetiology, presence and removal of tooth in the line of fracture, length of hospital stay (LHS), and postoperative complications including infection (major, minor), malunion, non-union and malocclusion were recorded.

Results

Forty subjects (39 male, 1 female) were included. The mean age was 24.3 (16-40) years. The mean time to presentation following injury was 1.75 (0-16) days.

Fracture aetiology was as follows:

- Assault 65% (n=26)
- Sport 22.5% (n=9)
- Falls 10% (n=4)
- Motor vehicle accident 2.5% (n=1)

Alcohol intake was reported in 60% (n=24) of cases. A tooth was present in the fracture in 97.5% (n=39) and removed in 82% (n=32). LHS was 5.4 (3-12) days. Pre and postoperative stay 1.9 (0-6) and 2.5 (1-5) days respectively. All patients underwent successful fracture treatment. The only complication was minor soft tissue infection, 12.5% (n=5). This occurred following fracture healing and was treated with oral antibiotics and bone plate removal in a day case setting. No bone related infections, malunion, non-union or malocclusions were recorded. The mean follow up was 26.2 (3-104) weeks.

Conclusion

Adherence to a strict protocol in the management of isolated MAF results in relatively low complication rates.

Presented

At the International Association of Dental Research in Gotenberg, Sweden on June 20th, 2003 by Dr. C. Barry.

Title

Carotid Endarterectomy – A Regional Audit

Authors

Adelola, O.A.,[1] Weinstein, C.L.,[1] Naqvi, S.A.,[1] Burke, P.,[1] Grace, P.A.[1,2].
Department of Vascular Surgery, Mid-Western Regional Hospital, Limerick [1]
University of Limerick, Limerick[2]

Introduction

Stroke represents a major cause of death and morbidity in the adult population. While there are many causes for acute stroke a common treatable cause is atheromatous disease at the carotid bifrucation. Carotid endarterectomy (CEA) is currently the treatment of choice for symptomatic carotid artery stenoses of ≥ 70% of the lumen. CEA may also be indicated for high-grade asymptomatic carotid artery stenosis in certain patients. CEA is a prophylactic operation and the surgical risks involved have a significant bearing on the ultimate benefits of the procedure. A recent meta-analysis of 38,000 CEAs indicates that the perioperative risk of stroke was 5.1% for symptomatic and 2.8% for asymptomatic patients. The aim of the present review was to audit the experience of CEA at the Mid-Western Regional Hospital (MWRH).

Methodology

A retrospective review of all CEAs performed at the MWRH was undertaken. From 1995 to September 2003, 94 CEAs were performed. Complete data were available on 87 patients. All operations were performed under general anaesthesia and an intraoperative shunt was used in all patients. (Javid n = 79, Pruitt/Inohara = 8) The age of the patients ranged from 43 to 84 years, with a median of 67 years. The majority of patients (85.1%) were symptomatic with the following presenting symptoms: Transient Ischaemic Attack (TIA): 31 (35.6%); Amaurosis Fugax (AF): 19 (22.4%); Stroke: 12 (14.1%); TIA and AF: 11 (12.9%); and minor neurologic deficit: 3 (3.5%).

All the patients had undergone carotid artery duplex scanning, eight patients (9%) had additional carotid magnetic resonance angiography (MRA) and 37 patients (43.5%) had CT brain scans. Carotid duplex scanning revealed that 69 patients (79.3%) had internal carotid artery stenosis of ≥ 80%, while stenosis of < 80% was found in 18 patients (20.7%).

Results

Figure 1 - Histogram of CEA Per Annum

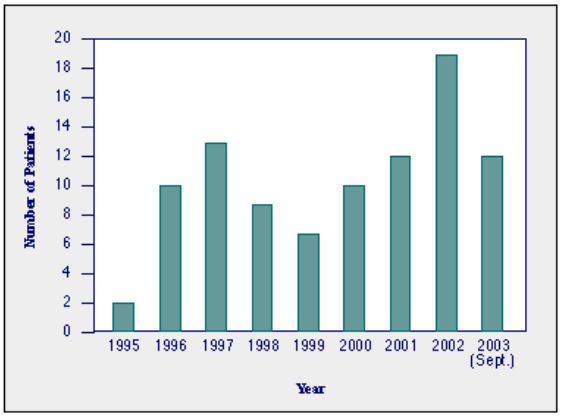


Table 1 - Result of CEAStudy

	Symptomatic	Asymptomatic	Total
No of Patients (n)	74	13	87
Male, n (%)	50 (67.6%)	7 (53.8%)	57 (65.5%)
Stroke	4 (5.4%)	-	4 (4.6%)
Death	2 (2.7%)	-	2 (2.3%)
Stroke and Death	4 (5.4%)	-	4 (4.6%)
Restenosis	1 (1.4%)	1 (7.7%)	2 (2.3%)

Conclusion

The number of Carotid Endarterectomy increased substantially since introduction in 1995. Results are consistent with best international practice. Carotid Endarterectomy continues to be an important component of vascular practice at the Mid-Western Regional Hospital in Limerick.

References

Available on request.

Presented

At a local Surgical Meeting in the Mid-Western Regional Hospital, Dooradoyle, Limerick on October 3rd, 2003 by Dr. O.A. Adelola.

Nursing and Midwifery

Title

Older Peoples' Experience of Rehabilitation and the Transition to Home Following a Stroke

Authors

Conway, G.
Nursing and Midwifery Planning and Development Unit, Mid-Western Health Board, Limerick

Introduction and Rationale

This research study focuses on exploring the older person's lived experience during the transition to home following the process of stroke rehabilitation. The literature review reveals that rehabilitation is the process that aims to restore a level of independence following illness or injury (Robinson and Batstone, 1996). The rehabilitative process should therefore ensure visible benefits to the older person (Nolan and Nolan, 1998: Macduff, 1998: Nazarko, 2001), in the interest of improving patient recovery (Waters and Luker, 1996: Dowswell et al., 2000). Burton (2000a, 2000b) feels that the expansion of nursing interventions based on people's experiences must be aimed at the development of coping and adaptation skills at home following the rehabilitative process. Wild (1994: 36) however states, "There is little research related to what the nature of rehabilitation is, let alone its effectiveness."

Methodology

There appears to be a need to explore older persons' experiences following the rehabilitative process during their transition to home. A phenomenological approach has been adopted, allowing the older person who has suffered a stroke describe their lived experience during the transition to home following the process of stroke rehabilitation. Nine participants have been interviewed in their own home following their transition from the rehabilitation unit, at a date and time that suited the older person and their relatives/carers. Ethical approval was obtained from the university, and the Health Board involved. Permission was obtained from the Hospital. Each participant gave consent, and the participants' confidentiality was assured throughout the research. Taped unstructured interviews were conducted with the older person. The Colaizzi (1978) method of data analysis was adapted and data was collected and analysed simultaneously utilising Colazzi's seven steps.

Results

The findings of this research are discussed within the context of the five significant themes that were described by the older person following stroke rehabilitation and during their transition to home. The key themes presented as a narrative, as described by the participants during the interviews are as follows:

- The day the stroke occurred
- The hospital experience
- Describing activities of living following a stroke
- The homecoming
- Support and encouragement

Rigour was developed throughout this research by the participants themselves finding that the interpretative story is "right" (Morse and Field, 1998), and the researcher produced a clear well sign-posted audit trial for others to follow.

Conclusion

The knowledge gained from this research can be utilised by practicing nurses who care for and interact with older people who have suffered a stroke, to further enhance the quality of care for the older person who has suffered a stroke. Nurses therefore, must continue to encourage and structure experiences during the recovery period that fosters the stroke

survivor’s maximal independence with activities of living and recovery of functional ability. Linking the research findings from this research study with findings from other studies, the knowledge that has been gained strengthens the evidenced-based nursing practice in the stroke rehabilitation of the older person.

References

Available on request.

Title

Consumer Satisfactory Survey of District Midwifery Service at The Regional Maternity Hospital

Authors

Clune, E.
Community Midwifery Office, Antenatal Clinic, Regional Maternity Hospital, Limerick

Introduction

The district/community midwifery service was pioneered at the Regional Maternity Hospital in the mid 1970's. This care is provided to mothers and babies living within a three mile radius of the hospital. No formal evaluation of the service has previously been undertaken.

Objective

The objective of the evaluation was to determine

- consumer satisfaction with the district/midwifery service
- to identify areas for improvement

Methodology

Over a 3 month period from June to September 2003, 140 consumer satisfactory surveys were given to women availing of the district midwifery service.

116 women completed the survey which gave a response rate of 85%.

Results

The results of the survey were as follows:

- 85 % rated the care they received as excellent
- 14 % stated the care they received was good
- 97 % said they would recommend this service to a friend
- 88 % found the individualised care in their own homes the most useful aspect of the district midwifery service. In addition 16 % equally considered breastfeeding support and having the metabolic screening for the newborn baby the most useful aspects.
- 13% cited early discharge from hospital
- 8 % cited other reasons i.e. reassurance, checking babies weight etc.

Recommendations

- An external audit of the service is to be completed by Dr. Jean Saunders, University of Limerick.
- A proposal to expand the district midwifery service should be presented for discussion at executive level.
- All staff to be made aware of the findings to include both medical and midwifery staff.

Conclusion

The overall consumer satisfaction with the district midwifery service was excellent with findings demonstrating a strong consumer led demand for the expansion of the district service.
The evaluation had a positive impact on staff morale, clearly showing the high standard of midwifery care in the district service.

Title

Audit of Patients Referred from the Accident and Emergency Department of the Mid-Western Regional Hospital Following Deliberate Self-Harm

Authors

O'Keeffe, B.[1], Mulqueen, J.[2]
Tevere Day Hospital, Limerick[1]
Mental Health Directorate, Mid-Western Health Board, St. Joseph's Hospital Campus, Limerick[2]

Introduction

Deliberate self-harm is the most accurate predictor of future risk of suicide (Isometsa & Lonqvist, 1998). It is estimated that between 10% and 15% of people in contact with healthcare services as a result of the first suicide attempt do eventually die by suicide (Isometsa & Lonqvist, 1998).

Rationale

The aim of the study was to examine the take up of next care options by patients after presenting at the Mid-Western Regional Hospital, Limerick following an episode of deliberate self-harm.

Methodology

The subjects were 528 patients (682 cases) who presented at the Mid-Western Regional Hospital following an incident of deliberate self-harm from January 1st to December 31st 2002. Variables recorded included gender, date of birth, date of presentation, method employed, admission status, who the patient was reviewed by, what the recommended next stage of care was, the follow-up after presentation and the place of referral.

Results

Within the Limerick Mental Health Service it was possible to ascertain attendance in 511 of the 682 cases. Of the 264 cases referred to the five day hospitals within the Limerick Mental Health Service, 42.4% (112) attended and 57.5% (152) failed to attend. Attendance for inpatient care was far higher with 77.2% (122) admitted to the acute psychiatric unit and 22.8% (10) refusing to be admitted.

Recommendations

The high rate of aftercare non-attendance is discussed in relation to the Limerick Mental Health Service and areas most at risk are highlighted. The implications of these findings are discussed in relation to reducing episodes of deliberate self-harm in the Mid-West region.

References

Available on request.

Title

Patients Views on Open Visiting Hours in the Mid-Western Regional Hospital, Limerick

Authors

Donnelly, T., Pillay, I., Curtin, M., Rooney, O., O'Connor, B., Lyons, D., Watts, M., Clinch, D.
Clinical Age Assessment Unit, Mid-Western Regional Hospital, Limerick

Introduction

In the last decade the number of acute geriatric admissions has increased as much as three-hundred fold. Time spent with these patients is essential in maintaining an acceptable standard of care. Since the introduction of the patient charter, there has been less adherence to structured visiting hours. This study aimed to assess patients'views on the recent change to open visiting hours.

Methodology

A questionnaire designed to examine patient preferences with respect to visiting hours was administered. All acute geriatric admissions were assessed by the medical team. The questionnaire was administered at the patient bedside by a member of the team within 1 week of admission. Those with severe cognitive impairment were excluded.

Results

One hundred patients were assessed within a two month period (July and August 2003). The average Mental Test Score was 9/10. The average age was 74 years (range 22 – 89). The principle diagnostic groups were ischaemic heart disease (42%), respiratory disease (20%), cerebrovascular accident or transient ischaemic attack (14%). Seventy per cent of patients were unaware of the existence of structured visiting hours. Forty-nine per cent expressed a dislike of open visiting hours and 61% expressed a preference to be left alone for periods of the day, namely during mealtimes and periods of personal care. Forty-two per cent preferred to be asked by staff if they were happy to accept visitors. One third wanted the option of restricting the visiting time to thirty minutes.

Conclusion

Medical and nursing staff would prefer structured visiting hours. This questionnaire aimed to find out if similar views were held by patients. A more structured approach to visiting hours is clearly preferred by patients.

Title

Symmetry of the Functional Reach Test

Authors

McKenna, O.,[1] Blake, C[2]
Physiotherapy Department, Mid-Western Regional Hospital, Limerick[1]
School of Physiotherapy, University College Dublin, Dublin[2]

Introduction

Balance is fundamental to physical function. Impaired balance may result in falls; therefore accurate assessments are vital to identify those at risk and to implement effective preventative measures. The Functional Reach Test (FRT) is a widely used clinical measure of dynamic postural control, therefore a standard method of application has to be established if it is to be used as a reliable outcome assessment tool.

Rationale

The FRT is defined as the 'maximal distance one can reach forward beyond arms length while maintaining a fixed base of support. Original test protocols examined the distance reached by the right arm. This study evaluated the symmetry of the FRT by assessing the variation in distance reached by right and left arms under standardised test conditions in a healthy population sample. Data was analysed using SPSS version 8.0.

Methodology

Twenty healthy volunteers aged 18-26 years were recruited from the students at University College Dublin (UCD) School of Physiotherapy. Exclusion criteria included; history of lumbopelvic or lower limb surgery, any musculoskeletal or neurological disorder, vestibular or visual disturbances, pain or inability to flex the shoulder to 90 degrees bilaterally.

Tests were carried out in the human performance laboratory of UCD School of Physiotherapy. The subject stood barefoot with the feet placed 15cm apart sideways to a wall. A meter rule was attached horizontally to the wall at the level of the acromion process. The subject then made a fist and flexed their shoulder 90 degrees, ensuring the acromion stayed level with the meter rule.

The 3rd metacarpal position was noted and the subject was instructed to 'reach forward as far as possible without losing balance or taking a step'. The end-position of the 3rd metacarpal was recorded and the distance reached calculated. The mean value of three trials was calculated and then the procedure was repeated for the opposite arm. Symmetry of reaching forward with right and left arms was also evaluated using the Bertec Pro-V Forceplate to calculate Centre of Pressure Excursion (COPE) during the reach task.

Results

Differences between mean values for right and left FRT and COPE were compared using the independent samples t test. There was no significant difference in mean FRT between right (35.4 +/- 7.8 cm) and left (35.8 +/- 6.6 cm) arms. Similarly no significant difference was found between the mean COPE when reaching with the left (12.2 +/- 3.0 cm) and right (12.5 +/- 3.6 cm) arms. (See Table 1).

Table 1 - Comparison of Right and Left FRT and COPE

	Right	Left	Significance Level
Functional Reach	35.8 (6.5)	35.4 (7.8)	n/s
COPE	12.5 (3.6)	12.2 (3.0)	n/s

Conclusion

This study suggests that the choice of limb tested does not significantly affect FRT result and that the test is symmetrical.

Presented

As a poster presentation at the World Confederation of Physical Therapists Conference, Barcelona, Spain, 7-12 June, 2003 by Ms. O. McKenna.

References

Available on request

Title

Mid-Western Health Board Haemovigilance is Associated with Reduced Usage and Improved Appropriateness of Blood Transfusion

Authors

Cahill, M.R., Joyce, S., O'Brien, N., Casey, M.

Haematology, Mid-Western Regional Hospital, Limerick

Introduction

In Ireland, as in other countries, the tragedy of HIV and Hepatitis C transmitted by clotting factor concentrates to patients with haemophilia has been the subject of national discussion, legal proceedings and compensatory tribunals. More than 1000 Rhesus D negative women have also been infected with Hepatitis C from home produced contaminated intravenous anti-D. The professional and government response has included haemovigilance programmes nationwide resourced by Department of Health funding.

Objectives

We report our data on decreased usage of blood and blood products with increased overall activity in the Mid-Western Health Board in Ireland following the introduction of haemovigilance.

Methodology

Retrospective audit utilising the *cognos* analytical software on the APEX laboratory system.

Results

In 2001 the overall use of blood has fallen 6% compared with the year 2000. Large reductions in the use of red-cell concentrates have been noted in medicine (13%), general surgery (19%) and orthopaedics (14%) (See Table 1). The discrepancy between reductions described above and the more modest overall reduced usage figure is accounted for by the new haematology (1998) and oncology (1999) services.

Table 1 - Comparison by speciality, of units of red-cell concentrate (RCC) cross-matched and units transfused for 1998-2001 and data on hospital discharges and procedures

	1998	1999	2000	2001
Units Cross-matched				
Dept of Surgery	2,523	3,190	3,905	3,389
Dept of Medicine	1,240	1,400	1,367	1,252
Dept of Orthopaedics (located off site)	2,754	2,683	2,915	2,160
Units Transfused				
Dept of Surgery	1,861	1,584	1,830	1,477
Dept of Medicine	1,011	951	928	810
Dept of Orthopaedics	629	772	635	546
Total Hospital Discharges	**27,705**	**28,101**	**30,629**	**34,299**
General Surgery admissions with inpatient procedures	2,499	2,372	2,741	2,773
Orthopaedic admissions with inpatient procedures	905	1,235	1,631	1,878
Medical discharges	5,434	5,161	5,340	5,568

The haemovigilance system in the Mid-Western Health Board commenced in 1999 following the appointment of the first consultant haematologist to the board. A full time Senior Haemovigilance Co-ordinator has responsibility for every institution within the health board region where blood is administered. Both nurses and technical staff fulfill haemovigilance officer roles, some on a part time basis. The system is run from an office staffed with a full time secretary and overseen by the Consultant Haematologist. The staff /running costs are approximately €200,000 yearly.
The haemovigilance programme is rooted within each hospital blood bank and amplifies and formalises work, previously carried out by transfusion scientists. Haemovigilance Officers have a reporting relationship to the Chief Scientist in the Blood Bank and to the Consultant Haematologist. The Mid-Western Health Board haemovigilance system operates within the National Haemovigilance system co-ordinated from the National Haemovigilance Office in Dublin.

The message of the haemovigilance programme is, 'use blood appropriately'. This message has found a receptive audience among doctors and patients in Ireland. This is partly due to the adverse publicity surrounding transfusion-transmitted infection. Nonetheless, the effect of an organised co-ordinated haemovigilance programme, which has put a haemovigilance presence on the ground in all hospitals where transfusions are administered, cannot be discounted.

The Haemovigilance team uses personal contact by consultants and haemovigilance officers with prescribers and users as an important means of effecting change. All incidents and "near misses" are followed up by direct person-to-person contact on multiple levels between the haemovigilance team and the prescribing team.

Conclusions

Current audits confirm appropriate blood use for the majority of transfusions now. Unfortunately, baseline figures pre-haemovigilance on appropriateness of blood usage do not exist. However, we believe our data demonstrate the efficacy of co-ordinated haemovigilance in optimising use of blood.

Recommendations

The success of the programme encourages its expansion in other counties.

Published

As "Haemovigilance is associated with decreased use and improved appropriateness of blood transfusion" in *Vox Sanguinis* (2003) 85, 121-122.

Title

Developing and Implementing Healthy Eating Guidelines in a Primary School Setting – A Pilot Approach

Authors

Griffin, A.C.

Clare Heart Health Team, Department of Health Promotion, Mid-Western Health Board, Ennis, Co. Clare

Introduction

The National Health Promotion Strategy 2000/2005 contains two major objectives for children: the promotion of healthy eating habits and the implementation of programmes in all schools consistent with the Health Promoting Schools concept.

Rationale

Children spend 30 hours a week at school during term-time. There are a number of meal and classroom opportunities that can be taken to improve a child's nutritional intake by promoting healthy eating.

Methodology

During the school year 2002-2003 a rural school with 120 pupils located 11 miles from Ennis was recruited. The school purchased a resource developed by the North Western Health Board for €25 to guide the process for developing healthy eating policies including classroom activities for primary schools. A working group representing the school community (acting principal, two parents and two senior pupils) was established to draft and implement the policy facilitated by the community dietician (AG). A specifically designed questionnaire pre- (to ascertain need for change; *n* 118 responded) and post- (to ascertain change achieved; *n* 119 responded) policy implementation was administered in the classroom with the teacher recording the hand count to document pupil responses providing observational data about lunchbox contents and awareness of the food pyramid. Following feedback obtained from the representative groups the policy was formally launched.

Results

Fifty parents provided feedback on the draft policy. These were generally positive; 54% (*n* 27) commented it was a good idea; 32% (*n* 16) stated they had no changes to make to the draft. With respect to dietary intake, there were particular increases observed in the number of pupils eating more than one piece of fruit (31% (*n* 37), drinking fruit juice (42%, *n* 50)) and eating sandwiches (3%, *n* 4)). The working group also commented on a noticeable decrease in the quantity of rubbish produced by the school and have opted to start a vegetable garden on the school grounds.

Conclusion

A healthy eating policy was successfully developed and implemented in the primary school environment and is now issued as part of the schools overall ethos. Indeed, the policy has extended beyond the promotion of an awareness of healthy eating from the food pyramid encompassing environmental factors (decreased waste and creating a garden).

References

Available on request.

Title

An Investigation of the Attitudes and Behaviours of Pregnant Smokers

Authors

Gibbons, M.,[1] Mannix-McNamara, P.[2]
Mid-Western Regional Maternity Hospital, Limerick[1]
University of Limerick[2]

Introduction

Research into smoking in pregnancy and smoking cessation has generally concentrated on different aspects, including health risks, demographics, interventions, their outcomes and the cost benefits of promoting smoking cessation in pregnancy. Research has demonstrated (Eastern Regional Health Authority, ERHA2000), that smoking and pregnancy is an issue that has a number of serious consequences and that health professionals are in a position to address these problems.

It has been suggested (Dines: 1994) that pregnant women who continue to smoke usually know the dangers of smoking to themselves and their babies. Lucas (1994 cited in Crafter) found that women generally accepted that smoking is detrimental to the unborn child, however those who smoked during pregnancy believe that the complications of smoking are unlikely to happen to them.

Rationale

The consequences of cigarette smoking as injurious to health are widely recognised by the medical community and the general public. Smoking cessation in pregnancy has been studied from the perspective of information and advice giving, however, the area of behavioural and attitudinal issues has not been investigated in great detail. To effect successful change in regard to behaviour and attitude, health promotion and education initiatives need to focus more specifically on smoking behaviours and attitudinal change, as simply providing information has traditionally enjoyed minimal success if any. Understanding why individuals hold beliefs and attitudes is extremely complicated. Health promotion activities should be based on trying to understand these influences and providing appropriate information and stimuli that lead to their reformulation. Smoking affects fertility in men and women, it affects foetal growth and development, increases the risk of premature birth, miscarriage and ectopic pregnancy. The National Health Strategy, Shaping a healthier future (1994) prioritised tobacco-smoking cessation. The estimated national smoking prevalence at that time was 28%. The more recent Slán survey (1998) showed that 40% of 18-34 year old women in Ireland smoke. Given that smoking cessation is of key importance to both short and long term parental and infant health, this demands urgent attention and routine incorporation into health care strategies.

Aim

To investigate the attitudes and behaviour of pregnant smokers.

Objectives

- To determine if the pregnant smokers actually consider their smoking as a risk factor.
- Why do some smokers quit during pregnancy and others do not?
- Can health professionals through consistent information and advice change how smokers perceive their behaviour?
- What form of health promotion or education is most appropriate in pregnancy?

Methodology

Data collection involved a multi-method approach incorporating both quantitative and qualitative research methods. However, for this particular study of attitudes and behaviours the use of qualitative methods was also necessary to seek to understand the individuals' perceptions of their world. The sample was a convenience one selected from a group of pregnant women at similar gestational age on a given day at the ante-natal clinic. An initial survey of fifty women

determined various attitudes to smoking and also the level of knowledge in relation to the risk factors. The response rate was 96%.

Semi-structured interviews were carried out with six self-selecting participants to investigate more fully the emerging data from the survey. This triangulation of data increased the validity of the findings. The opportunity of face-to-face interaction allowed for the fullest possible comprehension of the individual's world. It allowed for observation of verbal and non-verbal indicators, which in a sensitive area such as smoking during pregnancy, was very useful in highlighting areas for further investigation.

Conclusions

- Health professionals are providing information on the risks to the foetus of smoking of smoking in pregnancy.
- This information is not always successful in preventing smoking in pregnancy.
- More explicit information is called for, for example, posters depicting the effects of smoking on the foetus.
- Partner/family support is a strong predictor of successful cessation.
- Different levels of behaviour change are taking place and acknowledgement of these changes will facilitate further change.
- Participants were aware of the risks of smoking to the foetus; however as health professionals we must reinforce understanding of these risks.
- Factors affecting motivation levels (planned pregnancy, age, self-efficacy, employment) were suggested, however strategies to raise motivation levels could be the key to successful change. Creating a different image of the foetus as someone totally dependent, requiring nurturing throughout a forty week pregnancy and a healthy childhood. Intensive support for smokers who have an unplanned pregnancy would appear to be key strategy to adopt as part of routine ante-natal care.

Recommendations

- Development of smoking cessation interventions involving partners/families.
- Explicit posters to be designed clearly depicting the effects of smoking on the foetus.
- Staff induction sessions to include a health promotion co-ordinator, to stress the health promotion role of all health professionals.
- Have a written health promotion policy, stressing the importance of adopting a health promoting culture and ethos.
- On-going staff education/training on the effects of smoking in pregnancy and brief intervention skills.
- Have a standard follow-up procedure for smoking cessation clients by all health professionals to ensure that their smoking behaviour is on the agenda at every interaction.
- Involvement of General Practitioners and Public Health Nurses in follow on care.

Title

The Nature of Internal Mediator and Moderator Influences in A Healthcare System in Transition

Authors

deBúrca, S.

Mid-Western Health Board, Central Offices, Catherine St, Limerick

Introduction

This study explores the nature of internal mediator and moderator influences through the perspectives of two major activity domains in the Mid-Western Health Board as a healthcare system in transition. The general context of this case study relates to reform in the public service and in healthcare systems with particular reference to the Irish experience. Theoretical perspectives clarify the nature of management and the professions and the tensions between them. Models and approaches in the literature on organisational change and leadership are also examined.

Methodology

An inductive grounded research method, in this study, avoids *a priori* assumptions of leadership in a context of ambiguity and uncertainty. This provides opportunity to discover alternative explanations of internal change influence. The analytic framework is based upon category/paradigm analysis which relies on multiple data streams generated through two major activity domains (managerial and professional).

Findings

The findings are presented as an emergent model which accounts for the various components, categories and the inter-linkages arising from the analysis of the respondents' data. These components are external and internal contexts, antecedent and actual experience from the perspectives of two major domains, emerging as three activity strands: mediator influence, mediating through people and the operational system. The model's holistic framework is therefore grounded in the domains'interpretation of their experience of internal mediators and moderators of change.

Conclusion

The relevant extant literature demonstrates the relevance of the emergent model as an explanatory and developmental framework. It elucidates aspects of the internal logic of the organisation's influencing capacity as mediators and moderators of change rather than imposing external reductionist logic on participants' experience. Some recommendations for future research are indicated.

Title

An Analysis of Casemix Structure in Ireland - Does it Treat Participating Hospitals Fairly?

Authors

Brosnan, J.

Finance Department, Mid-Western Regional Hospital, Limerick

Introduction

The objective of this research was to examine the peer group structures used in the Irish case mix process and to determine if they facilitate fair reallocation of resources between participating hospitals.

Rationale

The author is interested in the structural composition of peer groups due to the expanding membership of the case mix process and the continuing fluctuation in hospital performances that do not seem to be fully explained by variations in volume or complexity of activity.

An examination of literature helped to trace the funding issues within healthcare in Ireland, to highlight the importance of ensuring economic efficiency and equity in resource allocation and chart the evolution of case mix as a resource allocation tool. It provided an overview of the case mix concept and its potential roles within acute hospitals. Through examination of case mix in other countries, principles were identified that guided the development of case mix peer group structures as a tool of hospital resource allocation.

Methodology

Arising from the literature review, a methodology was formulated based on gathering empirical evidence from the Irish case mix hospital population using a questionnaire approach and statistical analysis of hospital data.

Results

The survey indicated that hospitals attribute casemix performance to factors such as activity, costs, length of stay, teamwork and clinical co-operation. A significant number of hospitals do not consider casemix to be an unbiased and fair method of resource allocation. They believe that casemix structures do not recognize the dissimilarity of hospitals. The majority of hospitals feel that current peer group structures do not accommodate all costs incurred by hospitals nor expenditure unrelated to patient activity. Hospitals identified factors that should be considered when designing a resource allocation system. These include location, size, activity, level of costs, range of specialties and hospital function.

The statistical analysis of hospital data indicates that inpatient costs are strongly influenced by pay costs, bed-days, bed complement, discharges and number of specialties. Measurement of the relationship between influential factors demonstrates that the strength of the relationships is not maintained within the peer groups. The structures have distorted these relationships. A study of the characteristics of hospitals raises questions about the appropriate grouping of some hospitals within existing structures. This does not allow hospitals to be compared on an equal basis and implies that all hospitals may not be treated fairly when resources are being allocated.

Conclusion

The statistical analysis supports concerns raised by hospitals. It confirms the factors identified by hospitals as influencing hospital costs and raises questions regarding the appropriateness of current peer group structures. The opinion of hospitals is strengthened by the potential for distortion indicated by the statistical analysis of the data.

Recommendations

Bearing in mind the factors identified by hospitals as influencing hospital costs, confirmed by the statistical analysis and supported by literature, further statistical analysis was conducted to devise an alternative peer group structure for the Irish casemix process. This alternative structure recognizes the influence of factors such as activity, level of costs, bed-days, discharges, complexity and range of specialties. This 5 group structure was proposed as a more acceptable alternative than the existing 2 group structure which accommodates the concerns raised by participant hospitals. This increases the credibility of the alternative structure as a viable option.

While the limitations of the study are recognised, further recommendations are made to facilitate the growth and development of peer group structures.

These include:

- Regular review of peer group structures
- Clear principles to guide grouping of hospitals
- Use all factors that influence hospital activity and costs to group hospitals
- Structures must accommodate expenditure unrelated to patient activity
- Need to develop formal collaborative approach that involves all stakeholders

The need to adopt an independent mechanism that incorporates an advisory group to ensure a planned and agreed casemix implementation process is highlighted.

Title

Sedation in Paediatric Otoacoustic Emission Screening

Authors

Ahmed, I., Ramphul, N., Manning, K.P., Keogh, P.F., Fenton, J.E.
Mid-Western Regional Hospital, Limerick

Introduction

Otoacoustic emission is a non-invasive and integral tool in the diagnostic evaluation of infants and children with congenital hearing loss. Infants and young children are generally unable to co-operate fully resulting in a sub-optimal or failed test.

General anaesthesia is not considered the most appropriate form of sedation as the equipment may interfere with the assessment.

Sedation is the preferred method and in our department until October 2001 Vallergan was used as sedating agent in dosage recommended for pre medication (2mg/kg). The yield of successful sedation was poor. Since November 2001 Chloral Hydrate has been used as sedative resulting in more successful tests.

Objective

The aim of this study was to compare the efficacy of Vallergan and Chloral Hydrate as sedating agent in Otoacoustic emission.

Methodology

A retrospective review of all patient records who underwent otoacoustic emission between the years 1999 to 2002 was carried out.

Results

Between the year 1999 to October 2001 22 OAE'S were performed under sedation using Vallergan. Four were unsuccessful due to lack of sedation (18.1%) A total of 53 tests were carried out between November 2001 and May 2003 using Chloral Hydrate. Three were unsuccessful (5.66%).

Conclusion

Choral Hydrate as sedating agent for objective audiometry was found to be more suitable than Vallergan and resulted in a more successful outcome.

Presented

At an ENTAcademy Meeting in Westport, Co. Mayo on April 26th, 2003 by Mr. I. Ahmed.
At the British Association of Paediatric Otolarngology Annual Meeting in Liverpool, U.K. on September 12th, 2003 by Mr. I. Ahmed.

Title

Analysis of Referral Letters to an Old Age Psychiatry Department

Authors

Campbell, F., Parsons, B., Loane, R.
Department of Old Age Psychiatry, St. Camillus'Hospital, Limerick

Introduction

There is a scarcity of literature on the content of referral letters to Psychiatric Services and none relating, in particular, to referrals to an Old Age Psychiatry Department. This Department has noticed a marked increase in referral numbers in the last 5 years, which may reflect the ageing population and a greater awareness of our Service amongst Physicians and General Practitioners.

Objective

We aimed to evaluate the quality of information received, legibility of the referral, the clarity of the reason for referral and details of the pre-referral management.

Methodology

We carried out an analysis of the first 100 referrals to the Department of Old Age Psychiatry in the calendar year 2002. We examined the referral letter for the documentation of a number of demographic variables, reason for referral, interventions to date and level of priority.

Results

The data is currently being analysed.

Conclusion

We anticipate that the quality and quantity of information in the referral letter in many cases is insufficient to accurately prioritise cases and expedite appropriate assessment. We would like to initiate the introduction of a Pro-Forma Referral Form. Which would be specific to Old Age Psychiatry and which would include the unique information that is vital and which would hopefully lead to a more efficient service.

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St. Camillus' Hospital, Shelbourne Road, Limerick
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St. Camillus' Hospital, Shelbourne Road, Limerick, Ireland.
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