Trainees' presentations

RECOGNISED BY THE COLLEGE

PUBLICATION OF ABSTRACTS FROM THE BEST REGIONAL PRESENTATIONS

NORTHWEST VASCULAR SOCIETY MEETING

15 October 2008

CORRESPONDENCE TO

John G Mosley, Consultant General and Vascular Surgeon, Leigh Infirmary, The Avenue, Leigh, Lancashire WN7 1HS, UK
E: john.mosley@wvl.nhs.uk

Early carotid endarterectomy and peri-operative stroke: is any delay in surgery beneficial?

C PARMAR, F TORELLA

Department of Vascular Surgery, University Hospital Aintree, Liverpool, UK

CORRESPONDENCE TO

Francesco Torella, Department of Vascular Surgery, University Hospital, Aintree. Lower Lane, Liverpool L9 7AL, UK
E: f.torella@liv.ac.uk

Introduction

The objective of this study was to investigate whether delaying carotid endarterectomy (CEA) for symptomatic carotid stenosis influences the incidence of peri-operative stroke.

Patients and Methods

Analysis of a prospective database, including patients treated under the care of a single surgeon. Standard practice included CEA on the first available operating list for all patients, bar late presentations and unless contra-indicated. Statistical analysis was by logistic regression.

Results

Eighty-eight consecutive patients underwent surgery (17 under local, 71 under general anaesthesia), 36 for transient ischaemic attack, 44 for stroke and eight for ocular symptoms; 18 had 'crescendo' symptoms. Surgery was performed a median (IQR) of 5 (2–12) days after referral, and 12 (5–30) days after the presenting event (within one week in 32 cases). There were four peri-operative strokes (4.5%): two non-disabling ipsilateral events (2.2%), one non-disabling contralateral event (1.1%) and one fatal cerebral haemorrhage (1.1%). These occurred in patients operated 6, 21, 8 and 6 days after their presenting event, respectively. One patient suffered a silent myocardial infarction; there were no other deaths. Delay

in surgery did not offer any protection against peri-operative stroke (OR [95%CI] = 0.94 [0.84–1.1] for every one-day delay; $P = 0.29$). Neither surgery for stroke ($P = 0.59$) nor 'crescendo' symptoms ($P = 0.21$) were associated with peri-operative stroke.

Conclusions

We found no evidence that a delay in CEA protects against peri-operative stroke. Although larger studies may detect small decreases in stroke rates with delayed CEA, the clinical relevance of such finding is likely to be offset by the large benefit of early carotid surgery in stroke prevention.

ASiT ANNUAL CONFERENCE

Birmingham 2008

CORRESPONDENCE TO

Mr Ben Cresswell, President, The Association of Surgeons in Training, Royal College of Surgeons of England, 35–43 Lincoln's Inn Fields, London WC2A 3PE, UK
E: info@asit.org

ASiT Medal Prize Winner

Analysis of bedside entertainment services' effects on postoperative physical activity

S PAPASPYROS, S UPPAL, S KHAN, DJ O'REGAN

Leeds General Infirmary, Leeds, UK

Introduction

A rising number of acute hospitals in the UK have been providing patients with bedside entertainment services (BES) since 1995. However, their effect on postoperative patient mobility has not been explored. The aim of this prospective, randomised, clinical trial was to compare the level of postoperative physical activity and length of in-hospital stay of patients undergoing cardiac surgery depending on whether they had access to BES or not.

Patients and Methods

One hundred patients requiring elective cardiac surgery were randomised to receive access to BES ($n = 52$) or not ($n = 48$). Pedometers were used to quantify postoperative physical activity.

Results

On average, patients with access to BES walked less and stayed longer in hospital ($M = 6.40$; $SE = 0.09$) than those with no BES access ($M = 6.00$; $SE = 0.12$). The difference in steps was statistically significant for each postoperative day, represented a medium-to-large sized effect and ranged between 211 to 691 steps per day (Fig. 1).

Conclusions

We have demonstrated that bedside entertainment systems have an adverse effect on post cardiac surgery patient ambulation and may contribute to an increased in-hospital stay. The take-home message is to get them moving and they will get going. Alert patients on the adverse effects of immobility.

SARS/ASiT Short Paper Prize

The costs of surgical training

JEF FITZGERALD^{1,2}, A ARMSTRONG¹, A CARTER¹, J SMITH²

¹Nottingham University Hospitals NHS Trust and ²University of Nottingham Medical School, Nottingham, UK

Introduction

Over the past decade, the costs of postgraduate training have risen considerably. This has disproportionately affected surgical trainees as there is a significant skills component requiring specialist courses and also strong competition

driving training at all levels. This is set against dramatic increases in the costs of a medical degree, and cuts in study leave budgets. This study aims to calculate the average financial costs borne by junior surgical trainees themselves.

Subjects and Methods

Using Deanery mailing lists, we contacted specialty trainees by email and personal approach. An 8-item questionnaire was distributed and results analysed using SPSS v.15.0.

Results

Sixty-three trainees were contacted and replies received from 31 (49%). Of these, 61% were from junior grades (ST1/FTSA1 to ST3). Calculations were based on these to reflect current costs and avoid adjustments for inflation. On average, ST1 trainees had spent a total of £3156 to date (£2606 after deduction of study leave allowance). ST2 trainees had spent an average of £5902 (£4802 after deduction of study leave allowance). Figures include associated costs of travel and accommodation, where appropriate. There were no significant differences between surgical specialties. No trainee successfully claimed tax relief on these professional costs. Of note, these figures omit fixed costs such as GMC registration, Royal College fees, and medical indemnity.

Conclusions

Our study shows the costs of surgical training borne by trainees themselves as being significantly higher than previous estimates by ASiT. With the potential for new charges, such as a trainee fee as part of the ISCP, the Royal Colleges and Deaneries must recognise that junior doctors may be discouraged from undertaking surgical training without adequate study leave funding and more affordable training.

SARS Academic and Research Prize

Randomised, controlled trial assessing the effects of cilostazol on exercise-induced ischaemia-reperfusion in patients with peripheral arterial disease

ME O'DONNELL¹, SA BADGER¹, RR MAKAR¹, J MCENENY², IS YOUNG², LL LAU¹, B LEE¹, RJ HANNON¹, CV SOONG¹

¹Department of Vascular and Endovascular Surgery, Belfast City Hospital, Belfast, UK

²Department of Medicine, Queen's University, Belfast, UK

Introduction

The phosphodiesterase-3 inhibitor cilostazol improves walking distance in peripheral arterial disease (PAD) patients through an increase in cAMP levels. The study objectives were to assess the effects of cilostazol on exercise-induced ischaemia-reperfusion in such patients.

Patients and Methods

PAD patients were prospectively recruited to a randomised, double-blinded, placebo-controlled trial. Baseline clinical data were recorded following medical optimisation. Initial and absolute walking distances were measured on a validated treadmill protocol. Inflammatory response was assessed before and 30-min post-exercise by serum lipid hydroperoxide, interleukin (IL)-6 and IL-10, intracellular and vascular cell-adhesion-molecules (I-CAM and V-CAM), highly-selective C-reactive protein (hsCRP) measurement and plasma ascorbate analysis. All tests were at baseline, 6-weeks and 6-months.

Results

A total of 106 PAD patients (72 males) were recruited from August 2004 to August 2006 (overall median age: 66.5 years; range, 37–86 years). of whom 26 patients were diabetic. Treatment limbs were otherwise demographically and medically matched. Patients who received cilostazol, compared to placebo, demonstrated a mean percentage improvement from baseline in absolute walking distance (77.2% versus 26.6% at 6 weeks and 161.7% versus 79.0% at 6 months; $P < 0.05$, Mann–Whitney U-test). There was a reduction from baseline lipid hydroperoxide levels in the cilostazol group compared to an increase in the placebo group before and after exercise (at 6-weeks, pre-exercise –11.8% versus +5.8% and post-exercise –12.3% versus +13.9%; at 6-months, pre-exercise –15.5% versus +12.0% and post-exercise –9.2% versus +1.9%; $P < 0.01$, Mann–Whitney U-test). Cilostazol significantly reduced I-CAM and V-CAM levels at 24-week compared to baseline ($P < 0.05$, WSR-test). However, there was no difference between groups for IL-6, IL-10, ascorbate or hsCRP levels.

Conclusions

Cilostazol attenuates an exercise-induced ischaemia-reperfusion effect in PAD patients in combination with significantly improving claudication distance. The take-home message is that cilostazol is a highly efficacious treatment for improving walking distance in patients with PAD. This study demonstrates further beneficial systemic effects of cilostazol in such patients.

ASiT Medical Student Prize

The two-week wait policy for upper gastrointestinal cancer: does it work?

A SAHA¹, C HANDFORTH², L BELLAS², C SUTTON¹, SPL DEXTER¹, AI SARELA¹, HM SUE-LING¹

¹Leeds General Infirmary and ²University of Leeds, Leeds UK

Introduction

The two-week-rule states that all patients with suspected upper gastrointestinal (UGI) cancer must be seen by a hospital

specialist within two weeks of referral by their general practitioner. We aimed to study whether or not the policy improved survival.

Patients and Methods

All two-week wait referrals and all patients with UGI cancer diagnosed between September 2003 and January 2007 were reviewed. Mode of referral, disease stage and location, treatment outcomes and survival were recorded. Chi-squared analyses were performed to identify statistical differences between groups.

Results

A total of 1174 patients were referred under the two-week wait policy. Of these, only 127 patients (11%) had UGI cancer and 7% had cancer at other sites. There were 770 UGI cancers during the same study period and the two-week wait group accounted for 16% of these. Two-week wait referrals increased from 23 referrals per month to 34 referrals per month over the study period. Patients in the two groups (two-week wait versus non-two-week wait) were similar in terms of median age (72 years versus 72 years), gender (69% male versus 65% male) and tumour site. Patients referred under the two-week wait policy had a significantly higher proportion of high-stage tumour (87% versus 67%; $P < 0.001$) and distant metastasis (37% versus 23%; $P = 0.001$). Median survival was 10.7 months in the two-week wait group compared with 18.2 months in the non-two-week wait group ($P < 0.001$).

Conclusions

Patients referred under the two-week wait policy for UGI cancer had higher stage tumours and worse prognosis from time of diagnosis.

WELSH SURGICAL SOCIETY

Spring 2008

CYMDEITHAS LAWFEDDYGOL CYMRU

CORRESPONDENCE TO

TJ Havard, Honorary Secretary, Welsh Surgical Society, Department of Surgery, Royal Glamorgan Hospital, Ynysmaerdy, Llantrisant CF72 8XR, UK. E: tim.havard@pr-tr.wales.nhs.uk

Can minor colorectal surgery improve day case rate? A 5-year audit

AN MOIDEEN, H BAWDON, C DUFFY, L DAFYDD, P SHAH, A SHENKOROV, AG MASOUD

Department of Surgery, Prince Charles Hospital, Merthyr Tydfil, UK

Introduction

The UK Government has set an ambitious target to perform as much as 75% of elective surgery as day-case procedures.

The Audit Commission's 'basket' of 25 surgical procedures (2001) was deemed suitable for day-case surgery. The aims were to: (i) audit the practice of a single surgeon, with interests in colorectal and day-surgery, with regards to suitability of minor colorectal procedures as a day-case; (ii) determine our day-case rate and unplanned admission rates (UPAR); and (iii) examine safety and impact on primary and secondary care.

Patients and Methods

A 5-year audit of 157 consecutive day case minor colorectal procedures (2003–2007) selected using general day-case criteria. The trust extended the 'basket' by including pilonidal sinus and peri-anal fistula surgery. Our day-surgery unit functions 12 h/day. Patients undergo nurse-led pre-assessment prior to admission. Failure to discharge any patient by 7 pm was considered an unplanned admission. All patients had telephone review by a day-case nurse. Effects of age, sex and ASA grade on unplanned admission were studied. Statistical analysis was performed using the chi-squared test and logistic regression.

Results

The day-case surgery rate for minor colorectal procedures was 62.3% (157 of 252 patients). Our UPAR of 5% (8 of 157 patients) compares favourably to our overall UPAR for all general anaesthetic day-case surgery by the same surgeon, which was 6.5% (42 of 646 patients) (*see* Table 1 below). Age, sex and ASA had no impact on UPAR. No patients contacted a GP on the night of surgery. Three patients were re-admitted and one patient contacted the day-surgery unit for advice.

Conclusions

Two-thirds of minor colorectal procedures can be performed as day-case surgery with a low unplanned re-admission rate. The procedures are suitable and safe as day-cases, with no significant strain on primary or secondary care.

Impact of a diabetic foot service provided by a department of vascular surgery

GM SHINGLER, DT WILLIAMS

Ysbyty Gwynedd, North West Wales NHS Trust, UK

Introduction

Diabetic foot disease is a major cause of limb loss. Optimal management of tissue loss, sepsis and limb perfusion are critical to improving outcomes and preventing limb loss. We aimed to study the influence of the introduction of a focused diabetic foot service within the department of vascular surgery.

Patients and Methods

Data were collected on the number of lower limb amputations and debridements over the period 2004–2007, two years before and after the introduction of rapid access clinic slots and a monthly clinic for diabetic foot disease. The number of acute admissions to the vascular ward for patients with diabetic foot disease and average length of stay was also analysed.

Results

The numbers of partial foot amputations, toe amputations and debridements have remained relatively constant, with 32 and 47 procedures in 2004 and 2005, and 46 and 31 procedures in 2006 and 2007, respectively. Above- and below-knee amputations have seen a reduction from 28 and 33 in 2004 and 2005, to 15 and 12 in 2006 and 2007, respectively. The mean length of stay for all patients on the vascular ward increased from 8.89 days to 9.28 days and 9.8 days over the same period. The number of patients admitted acutely with diabetic foot disease in 2006 and 2007 were 19 and 20. Their mean length of stay over the same period was 38.4 days and 30.9 days, respectively.

Conclusions

The introduction of a focused diabetic foot service has seen no impact on the number of relatively minor procedures but has been associated with a greater than 50% reduction in

Table 1 Results of a 5-year audit of 157 consecutive day case minor colorectal procedures (2003–2007)

Total	In-patient	DSU	Day-case rate (%)	Operation	DSU	UPA	UPAR (%)	P-value
54	17	37	68.5	Laying open of low anal fistula	37	2	5.4	0.61
16	10	6	37.5	Seton insertion for high anal fistula	6	1	16.6	0.18
13	5	8	61.5	Banding/injection of haemorrhoids	8	0	0	NS
22	12	10	45.5	Haemorrhoidectomy	10	2	20	0.15
37	8	29	78.4	Excision of pilonidal sinus	29	1	3.4	0.69
88	36	52	59.11	EUA	52	1	1.9	0.71
22	7	15	68.2	Lateral sphincterotomy	15	1	6.6	0.56
152	95	157	62.3	Total	157	8	5	0.62
				All day-case procedures	646	42	6.5	0.58

major amputations within 2 years. Patients with diabetic foot disease represent a relatively small proportion of the total admissions, but their length of stay is typically far longer. This service, whilst aiming to improve outcomes and reduce the burden of diabetic foot disease for patients and carers in the community, places greater demands on in-patient services compared to other patients on the vascular unit.

Do clerking proforma improve the quality of notes?

CG FAIRWEATHER, GM SHINGLER, DT WILLIAMS

Ysbyty Gwynedd, North West Wales NHS Trust, UK

Introduction

The quality of patient admission clerking by junior doctors continues to be a concern. Proforma are used widely in an attempt to improve the quality of clerking. Currently at our institution, proforma are used for medical, but not surgical, admissions. It was unclear whether the proforma improved the quality of data collection. As part of an audit, we aimed to assess the quality of the two clerking formats.

Patients and Methods

Over a 2-month period, we randomly selected 300 admission clerkings, equally divided between the acute medical and surgical wards. The data were analysed using a marking scheme that identified 27 points of information deemed important to a clerking by Royal College of Physicians guidelines and given a total score.

Results

The mean total percentage scores for clerking were 77.4% and 75.9% for medicine and surgery, respectively. There was a greater range of scores in surgery, achieving both the highest and lowest values. The medical proforma generally limited the extremes of clerking quality. Medical notes versus surgical notes scored relatively well on neurological examination (92.7% versus 16.7%), drug history (87.3% versus 51.3%) and social circumstances (92.7% versus 67.3%). However, basic observations were documented more frequently in surgical notes (86.0% versus 60.7%). Further, no medical clerking had the patient ID attached to every page, nor the name of the consultant on call, compared to 96% and 56% of surgical clerkings.

Conclusions

Employing a proforma did not result in an overall improvement in quality but improved the consistency of patient clerking in that they appeared to reduce the small number of very poor clerkings. We identified that SHO/SpRs in accident and emergency performed poor surgical clerkings, whilst fifth year medical students achieved the highest

scores. The proforma had space for patient ID on the front page only. Space for patient ID and consultant details should be introduced to all pages of the proforma. On the basis of our findings, we propose that the proforma be revised to an *aide memoir* on the first sheet, as this would reduce both wastage and the size of notes without compromising quality.

The effect of introducing an admission proforma on the appropriateness of thromboprophylaxis prescribing for surgical emergencies

RY KANNAN, C DUGGAN, S BOULTER, R SHAKESPEARE,
B NATARAJAN, F ARIKAT, PJ MILEWSKI, W MAXWELL

Withybush General Hospital, Fishguard Road, Haverfordwest, Pembrokeshire, UK

Introduction

The recent publication of National Institute for Health and Clinical Excellence (NICE) guidelines has focused attention on the need to provide appropriate thromboprophylaxis. The aim was to audit the effectiveness of our thromboprophylaxis using an updated scoring sheet that was introduced to our institution during 2006, and to re-audit following the introduction of a structured admission sheet incorporating the thromboprophylaxis one.

Patients and Methods

Random selections of case notes were provided by the Medical Records library, of emergency surgical admissions. The first audit used 95 cases admitted between April and July 2007. The re-audit used 102 cases between November 2007 and January 2008. Age, sex, admission and discharge dates, diagnosis, complications, identifiable risk factors and whether or not the forms were filled in, were recorded. However, body weight and height could not be reliably recorded from the notes.

Results

The first audit showed that in only 8 of 95 patients (8.4%) was the thromboprophylaxis proforma used. However, thromboprophylaxis was actually prescribed in 64 patients (67.4%). In these patients, we do not know whether the prescription was appropriate according to the risk score that would have been determined from the proforma. The re-audit (following addition of the admission proforma to the thromboprophylaxis one) showed a great improvement in use of the thromboprophylaxis form. Both forms were filled in for 69 of the 102 patients (67.6%). In 62 of these (60.7% of the total), the prescription was appropriate according to the calculated risk. There was no recorded thrombo-embolic episode in either audit.

Conclusions

The introduction of a structured form proved attractive to staff and improved markedly the reliability of calculating risk score through use of the thromboprophylaxis form. However, the overall thromboprophylaxis prescription rate was not affected. We think that it is more likely that the second series of patients actually received appropriate prophylaxis, because of the use of a score. However, in the long run, further improvements are necessary to increase the proportion of patients for whom a score is calculated, and appropriate prescription written.

Outcomes of resection and non-resection strategies in patients with advanced colorectal cancer

MD EVANS¹, X ESCOFET¹, JD STAMATAKIS¹, SS KARANDIKAR²

¹Department of Surgery, Princess of Wales Hospital, Bridgend, UK

²Department of Surgery, Heart of England Foundation NHS, UK

Introduction

The management of patients presenting with incurable bowel cancer at presentation is controversial. The aim of this study was to compare the outcomes of surgically incurable colorectal cancer managed by resection and non-resection strategies over a 7-year period in a single centre.

Patients and Methods

Patients with surgically incurable colorectal cancer at presentation were identified from a prospective database. Survival, stoma rates and operative mortality were compared between three subgroups: (i) patients managed by resection of the primary; (ii) patients managed by non-resectional intervention (diversion and bypass surgery, stent and oncological treatments); and (iii) those patients managed with supportive care only. Survival was compared using Kaplan–Meier and log-rank methods.

Results

Of 646 consecutive, newly diagnosed, colorectal cancer patients over a 7-year period, 154 (24%) were surgically incurable at presentation (Table 1).

Survival was not significantly different between surgical resection and non-resection intervention groups ($P = 0.21$). Only one patient initially managed by non-resection intervention subsequently required surgery for primary tumour related complications.

Table 1	Surgical primary resection ($n = 45$)	Non-resection intervention ($n = 52$)	Supportive treatment ($n = 57$)
Median survival (months)	11	7	2
IQ range(months)	3–18	2–15	1–8
Stoma rate	40% (18/45)	19% (10/52)*	0%
Operative mortality	16% (7/45)	36% (5/14)	0%

*Only 14 cases had surgical treatment.

Conclusions

This non-case matched, prospective study has shown that the surgical treatment of advanced colorectal cancer is associated with a significant risk of in-hospital mortality and high stoma rates with no significant survival advantage. Non-resection strategies should be considered whenever possible in the management of stage IV bowel cancer.

Is out-patient assessment of minor surgical problems unnecessary? Results from a 'one-stop' clinic at a district general hospital

J WRIGHT, A PAREKH, SI MORGANS, B ROBERTS, S WILSON, K HARRIES

Dept of General Surgery, Withybush Hospital, Haverfordwest, UK

Introduction

Increasingly demanding waiting-list targets make any streamlining of the patient pathway attractive as long as it does not involve a compromise in the standard of care. We present the early results of a 'one-stop' clinic.

Patients and Methods

All general practitioner (GP) referral letters are assessed by a surgical consultant and those patients deemed appropriate for the 'one-stop' clinic are contacted by the day surgical waiting list co-ordinator. If they are agreeable, they are given a date for surgery. We have retrospectively audited the first year results of this service to identify whether it is safe and efficient.

Results

A total of 443 patients were contacted. Twenty (5%) declined the service and were re-routed through outpatients. Ninety-four patients (21%) were deleted from the waiting list immediately as they did not want surgery, or had already had the procedure elsewhere; four were put on hold. Therefore, 335 patients were given day surgical appointments (20% hernias, 22% vasectomies, 58% 'lumps') and 324 had surgery as planned with a 1.6% wound infection rate and no other complication. All were treated and discharged within 12 weeks of referral. Of the 11 'failures' (3%), six were a consequence of communication failure in the first few months (not starved). This problem was quickly resolved. Only four were as a result of mis-diagnosis by the GP. One patient had to be cancelled through a lack of theatre time.

Conclusions

The system appears both safe from a patient perspective and efficient, with few cancellations due to inappropriate referral or selection. Overall, 423 out-patient appointments were saved as a consequence of this system and, at our hospital, waiting times for out-patients fell from 10 months to 5 months with no increase in day surgical waiting times.