Letters

UPTAKE OF THE USE OF PATIENT-DOCTOR E-MAIL IN AN ENDOCRINOLOGY OUTPATIENT SETTING

Editor

E-mail communication between doctor and patient is becoming increasing popular, particularly because of the availability of electronic health care records (EHR) and *e*health resources such as 'Patient Portals'. E-mail can be utilized to enhance access to healthcare, health promotion, facilitating clinical management and in some settings, replacing the outpatient clinic visit.[1,2] Perceived advantages include a rapid response time, usage outside of normal working hours, improved patient-doctor communication and the ability to initiate management plans at an earlier stage. However, implementation of e-mail appears to be under-utilized. Possible explanations include presumed increased workload for the clinician, matching patient expectations, issues of confidentially and medico-legal implications.[3] Against this background we aimed to assess the rate of uptake of e-mail at a weekly new-patient endocrinology clinic.

TABLE 1

Various reasons for e-mails being sent

Reason for e-mail	Number n=37
Medical advice	11
Test results sent by patient for advice	7
Test results sent by GP for advice	7
Clinical query	6
Advice on medication	3
Scheduling of appointments	1
Scheduling of investigations	1
Medication side effect reported by patient	1

Methods

All patients were advised at their initial clinic visit of the availability of e-mail communication. The consultant's hospital e-mail was provided on the clinic letter patients received after their appointment. All patients were reviewed by one endocrinology consultant. Upon receipt, all e-mails were documented in the patient's clinical notes. Data was collected prospectively over a 12 month period between 1st January and 31st December 2015.

Results

224 patients (146 female, 78 male) with a mean age of 47 years (range 14-90 years) were included in the study. 11/224 (5%) of patients utilized e-mail over the study period. Of the 11 patients, 9 were female and 2 male, with a mean age of 45 years (range 22-87 years). A total of 37 e-mails were received, 30 from patients and 7 from general practitioners (GP's), six patients and three GP's sent one e-mail, one patient sent two e-mails, two patients sent three e-mails, one GP sent four e-mails, one patient sent six e-mails, and one patient sent ten e-mails. The reasons for e-mail correspondence are outlined in Table 1 and included seeking medical advice, advice on test results and scheduling of appointments and investigations.

Discussion

Online communication by e-mail in the outpatient setting has the potential to be convenient for patients and efficient for doctors.[4] This study's main finding is that uptake of e-mail between patient and doctor in an endocrine outpatient setting was low at 5%. Although the numbers were small it appeared that most users of e-mail were young and female and advice on tests results and medical advice were the most frequent queries. The uptake of e-mail from some GP's shows a willingness to engage in using e-mail as a form of communication and has the potential to be explored further. Various factors correlating with the uptake of patient-doctor e-mail have been explored in other large series and have included age, access to internet, patient health status, doctor specialty and workload.[5] However, the numbers were too small in this study to address these factors. Although the uptake of e-mail was low, the results are relevant and timely with the widespread use of electronic health care records in Northern Ireland and the potential for the development of an interactive multi-functional 'patient-portal' with the facilities for secure e-mail access to allow for more efficient communication between doctor and patient.

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REFERENCES

1. Ronda MC, Dijkhorst-Oei LT, Rutten GE. Reasons and barriers for using a patient portal: survey among patients with diabetes mellitus. *J Med Internet Res*. 2014(Nov 25); 25;16(11):e263.
2. Menachemi N, Prickett CT, Brooks RG. The use of physician-patient email: a follow-up examination of adoption and best-practice adherence 2005-2008. *J Med Internet Res*. 2011(Feb 25);13(1):e23.
3. Moyer CA, Stern DT, Dobias KS, Cox DT, Katz SJ. Bridging the electronic divide: patient and provider perspectives on e-mail communication in primary care. *Am J Manag Care*. 2002;**8(5)**:427-33.
4. Santana S, Lausen B, Bujnowska-Fedak M, Chronaki C, Kummervold PE, Rasmussen J, *et al*. Online communication between doctors and patients in europe: status and perspectives. *J Med Internet Res*. 2010(Jun15);**12(2)**:e20.
5. Newhouse, N., Lupiáñez-Villanueva, F., Codagnone, C., & Atherton, H. Patient use of email for health care communication purposes across 14 european countries: an analysis of users according to demographic and health-related factors. *J Med Internet Res*. 2015(Mar 6);**17(3)**, e58.

TOXOPLASMA SEROPREVALANCE IN NORTHERN IRELAND

Editor,

Toxoplasma gondii is the causal agent of toxoplasmosis, a common parasitic infection of humans acquired either by ingestion of oocysts voided in cat faeces or tissue cysts in undercooked meat. In humans, infection is mainly asymptomatic or accompanied by mild self-limiting symptoms. Infection or reactivation in immunocompromised patients can have serious clinical consequences. Primary infection in pregnancy can lead to miscarriage, stillbirth or congenital toxoplasmosis. The majority of infected neonates do not have detectable disease at birth but carry a significant risk of developing ocular disease in later life. Historically, Northern Ireland has been considered and cited as the area with the highest toxoplasma seroprevalence in the UK at 40% in blood donors[1], 36% in diagnostic samples[2] and even higher seroprevalence rates in farmers in Northern Ireland of 73.5%[3] However all this data actually relates to samples tested several decades ago. There has been no data in the literature on toxoplasma seroloprevalence in Northern Ireland population for more recent decades. The impression within our laboratory is that the seroprevalence rate has fallen dramatically and was now more in line with rest of UK. We set out to determine if this was the case.

TABLE 1

Toxoplasma seroprevalence (IgG) data by age bands

Year of birth	Positive/total tested (% positive)	Equivocal
1920-1929	17/20 (85.00)	0
1930-1939	48/84 (57.14)	3
1940-1949	135/358 (37.70)	19
1950-1959	165/583 (28.30)	16
1960-1969	130/724 (17.96)	20
1970-1979	169/1139 (14.83)	10
1980-1989	179/1555 (11.51)	9
1990-1999	50/795 (6.29)	10
2000-2015	37/529 (6.99)	11
TOTAL	930/5787 (16.07)	98

Materials and Methods

A convenience set of 5787 samples received from January 2012 until September 2015 were tested routinely for *Toxoplasma gondii* IgG using either Vidas Toxoplasma IgG II assay (bioMérieux UK Ltd, Basingstoke, England) or Elecsys Toxo IgG (Roche Diagnostics, Rotkreuz, Switzerland)). Equivocal results were regarded as seronegative for purposes of analysis.

Results

Of 5787 sera tested, 16.07% were seropositive but there was a marked reduction in seroprevalence with younger age (table 1 and figure 1). A total of 85% of samples from patients born between 1920 and 1929 were seropositive contrasting with 6% for patients born between 1990 and 1999.

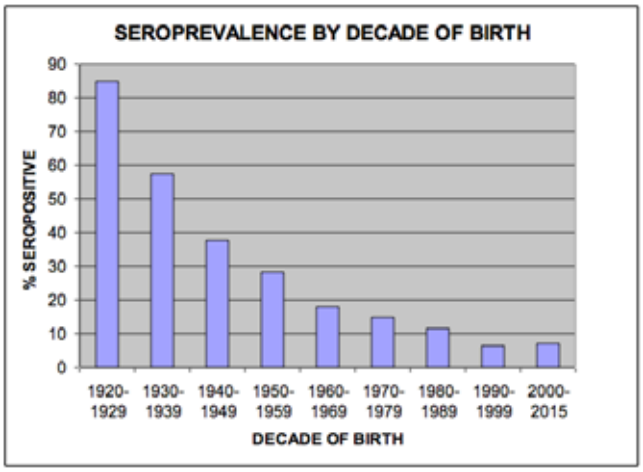

Fig 1. Toxoplasma seroprevalence by age band

Discussion

The most likely interpretation of this data is an age cohort effect suggesting that acquisition in childhood has decreased greatly over the past 50 years. It should be noted that the vast majority of the samples in the post-2010 DOB group were from babies and thus reflect maternal seroprevalence (similar to age cohorts 2 decades previously), hence explaining the slight apparent upward trend in this group.

Other countries such as France with previously reported high seroprevalence rates have seen marked decreases in seroprevalence[4]. It is likely that such decreases in toxoplasma seroprevalence are due to changes in animal husbandry and food exposure. Knowledge of current seroprevalence is important for understanding the epidemiology and determining approaches to congenital toxoplasmosis in Northern Ireland and similar countries.

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REFERENCES:

1. Advisory Committee on the Microbiological Safety of Food (ACMSF). Ad Hoc Group on Vulnerable Groups. Report on Risk profile in relation to toxoplasma in the food chain. London: Food Standards Agency; 2012. Available online from: www.food.gov.uk/sites/default/files/multimedia/pdfs/committee/acmsfrtaxopasm.pdf. Last accessed September 2016.
2. Smyth ET. Toxoplasmosis in Northern Ireland 1982-83. Ulster Med J. 1984;53(2):128-30.
3. Stanford CF, Connolly JH, Ellis WA, Smyth ET, Coyle PV, Montgomery WI, et al. Zoonotic infections in Northern Ireland farmers. Epidemiol Infect. 1990;105(3):565-70.

4. Derouin F, Bultel C, Roze S. AFSSA (Agence Française de Sécurité Sanitaire des Aliments). Toxoplasmose: état des connaissances et évaluation du risque lié à l'alimentation. Rapport du groupe de travail "Toxoplasma gondii" de l'AFSSA. Nancy, France: Bialec. Available online from: https://www.anses.fr/en/system/files/MIC-Ra-Toxoplasmose.pdf. Last accessed August 1st 2016.

WHY ASTHMA STILL KILLS

Editor,

In May 2014, the RCP National Review of asthma deaths was published, entitled "Why asthma still kills"[1]. The report reviewed asthma deaths in the four UK countries over a 12 month period. One recommendation was that all asthma patients who have been prescribed more than 12 short acting beta agonist (SABA) reliever inhalers in the previous 12 months should be invited for urgent review of their asthma control[2].

Following on from this report, I conducted an audit of SABA overuse in asthmatics in a GP practice in West Belfast during my FY2 rotation.

Method: An EMIS search was conducted of asthma patients who had been prescribed 12 or more salbutamol inhalers from January 2014- 2015. Patients were contacted by telephone or sent a letter to invite them to attend for review of their asthma- starting with those issued the highest quantity of SABA inhalers. They were reviewed by FY2, practice pharmacist and two practice nurses.

Results: The total number of asthmatic patients prescribed salbutamol in the Year 2014-2015 was 576, with 145 prescribed 12 or more inhalers (25%). The largest quantity issued to a single patient was 44. The table below demonstrates the breakdown of number of inhalers prescribed.

Number of inhalers prescribed	Number of patients
12	**31**
13-19	**51**
20-29	**41**
30-39	**20**
40+	**2**

From January-March 2015, 98/145 had been offered appointments or contacted via telephone about their SABA overuse. 46/98 had a review and discussion about their asthma. Those who have failed to attend for review and had been receiving > 1 inhaler per prescription had their prescription reduced to 1 inhaler per script, with a note to make an appointment for review of their usage.

Discussion:

This audit suggested that around ¼ of asthmatics in the practice were poorly controlled. On further review, a large number had failed to attend for an annual asthma review (45%). In those patients reviewed between January and March, their SABA usage had started to reduce over the 3 month period. At review, they were assessed using the BTS/SIGN guidelines, which cover a spectrum of areas. It was evident that education was very important for them. They were provided with a personal asthma action plan to refer to if they became symptomatic. This audit was presented at the monthly practice meeting in order to update the GP partners and highlight the issue. We would recommend vigilance when prescribing inhalers – those with excessive usage may benefit from education and personal action plans with the goal of reducing avoidable mortality.

The authors have no conflict of interest.

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REFERENCES

1. Levy ML, Andrews R, Buckingham R, Evans H, Francis C, Houston R, *et al*. Why asthma still kills: The National Review of Asthma Deaths (NRAD). Confidential Enquiry report. London: Royal College of Physicians; 2014. Available online from: www.rcplondon.ac.uk/sites/default/files/why-asthma-still-kills-full-report.pdf. Last accessed September 2016.

2. Regional Pharmacy and Medicines Management Team. Newsletter supplement: Why Asthma Still Kills. The National Review of Asthma Deaths (NRAD). Belfast: HSC Northern Ireland Formulary Medicines management; 2015. Available online from: http://niformulary.hscni.net/PrescribingNewsletters/PDF/NIMM_2015/NIMM_%20NewsletterspecialSupplement_Jan15.pdf Last accessed September 2016

INAPPROPRIATE ED ATTENDANCES IN NORTHERN IRELAND: A REVIEW OF ATTENDANCES IN THE BELFAST HEALTH AND SOCIAL CARE TRUST

Editor,

Inappropriate attendances (IAs) at Emergency Departments (EDs) may impact on patient safety and flow through the unscheduled care system. These are attendances where care could have been provided safely and more appropriately in other locations, e.g., by a general practitioner (GP) or by self-management. This study aimed to identify the number and type of IAs at EDs in the Belfast Health and Social Care Trust.

Notes of two consecutive days' ED attendances at the Royal Victoria Hospital (RVH) and Mater Hospital (MIH), 11th and 12th January 2015, were reviewed. During these days there were no significant incidents that would have been expected to alter the number or type of attendances. IAs were identified as those where the ED team did not provide any change in management or add to the patient journey or where, although the team may have provided some management, care could have safely been provided in another setting.

There were 646 attendances during the review period. Most were appropriate; 93.5% at the RVH ED and 79% at the MIH ED.

Of the 75 IAs, 59 (79%) were in individuals who had self-presented. This included 22 patients at the RVH (5% of all RVH attendances) and 37 at the MIH (16% of MIH attendances). 16 IAs (21%) were in patients referred by a GP, who did not require ED care. This included 5 attendances at RVH and 11 at MIH.

Very few IAs were assigned a Manchester Triage Category of 5 (non-urgent) (Figure 1). 6 patients were categorised as Category 2 (very urgent) and 43 as Category 3 (urgent).

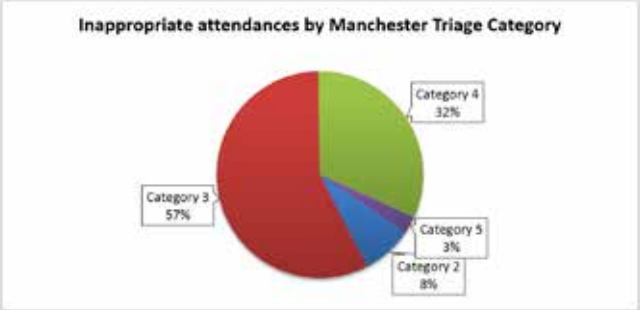

Fig 1. Inappropriate attendances by Manchester Triage Category

This study identified that most attendances were appropriate. The MIH had a greater proportion of IAs with larger numbers of both inappropriate self-presentations and GP referrals. This may reflect accessibility to primary care or a greater prevalence of chronic illness in the catchment area.

The proportion of IAs was 11.6% overall. This is similar to the findings of an analysis of attendances captured in a national ED dataset over one year, which identified 11.7% as inappropriate.[1] Other studies estimate a greater proportion of attendances to be avoidable. A systematic review suggested that 20-40% of attendances were inappropriate.[2] Analysis of the Royal College of Emergency Medicine Sentinel Site Survey, conducted in March 2014, identified around 15% avoidable attendances.[3] This variation may be due in part to the lack of a standardised definition of 'inappropriate' attendances.

Some patients may be being triaged into higher categories than their clinical condition would necessitate. A recent systematic review identified that the Manchester Triage System had both potential to under- and over-triage patients, impacting on safety in the ED and waiting times for patients.[4]

A limitation of this review is its small size. As it was carried out through retrospective note review, it is limited by the amount of information recorded on the notes. It may be possible that some presentations were wrongly categorised as inappropriate or appropriate.

This analysis has provided information on the proportions of patients attending ED in the Belfast Trust who have potential to be seen safely in an alternative setting. This may help to inform future investment decisions for those working in unscheduled care in Northern Ireland.

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REFERENCES

1. McHale P, Wood S, Hughes K, Bellis M, Demnitz U, Wyke S. Who uses emergency departments inappropriately and when - a national cross-sectional study using a monitoring data system. *BMC Med*. 2013;**11**:258.
2. Vidal Carret ML, Gastal Fassa AC, Rodrigues Domingues M. Inappropriate use of emergency services: a systematic review of prevalence and associated factors. *Cad Saúde Pública*. 2009;**25(1)**:7-28.
3. Morris T, Mason S, O'Keeffe C, Moulton C. What proportion of patients are attending the ED avoidably? An analysis of the Royal College of Emergency Medicine's Sentinel Site Survey [abstract]. *Emerg Med J*. 2015;**32(12)**:988-9.
4. Parenti N, Reggiani ML, Iannone P, Percudani D, Dowding D. A systematic review on the validity and reliability of an emergency department triage scale, the Manchester Triage System. *Int J Nurs Stud*. 2014;**51(7)**:1062-9.

DO THE PUBLIC GET WHAT THE PUBLIC WANTS IN NORTHERN IRELAND HEALTH AND SOCIAL CARE?

Editor,

Healthcare systems in Northern Ireland have undergone some degree of transformation over the last decade. Within the hospital sector, some services have relocated from smaller "local hospitals" to larger units. However, reorganisation of services has proven difficult, with evidence based proposals ignored and service alterations overturned by Government or judicial review, often as a consequence of "Save our hospital" campaigns by local community groups and political representatives. It is nonetheless unclear if these voices are representative of the population.

The recently published Donaldson Report recommends a major service reconfiguration to provide the Northern Ireland population with optimal secondary healthcare.[1] The subsequently appointed Northern Ireland Health and Social Care (HSC) Review Panel aims to determine the needs of the Northern Ireland population and describe a configuration of health and social care to best serve these.

Over recent years, increasing emphasis has been placed on empowering patients by offering more choice on treatment location and methods, similar to other consumer choices[2]. In this context, do patients employ a similar decision making process when contemplating healthcare decisions to that employed when purchasing other consumer commodities? We compared Northern Ireland public attitudes to healthcare with that of traditional consumer goods.

Methods

Questionnaires to assess public attitudes were distributed over a two-week period (18th-31st July 2014) in two locations-Belfast and Newcastle, County Down. Participants living

within the Greater Belfast area were considered to be urban dwellers, all others were considered rural dwellers. Data were analysed using SPSS (Version 21.0 Armonk, NY).

Results

One hundred questionnaires were completed. The participants rated accessibility of healthcare as more important than accessibility for traditional consumer products (Table 1). Participants would travel further for healthcare treatments than a variety of consumer products. Notably, participants would travel further for high quality products including healthcare treatments than for products of average quality (Table 2).

Table 1.

The importance of accessibility to healthcare and consumer items

	Importance of accessibility*
Sick children	4.63
Cancer treatment	4.63
Accident and Emergency	4.39
Cardiac surgery	4.16
Outpatient clinic	4.09
Bread	4.09
Everyday essentials e.g. shampoo	4.04
Large household appliances	2.78
Clothes for a special occasion	2.55
Television	2.51

*Accessibility was measured on a Likert scale from 1-5 with 5 being highest importance

Discussion

Consumers have similar attitudes to healthcare as they do to other consumer commodities. Consumers are willing to travel further for what they perceive to be specialised products or large one off purchases such as a fridge or television. Similarly, consumers are willing to travel further for traditionally perceived specialised treatments such as cardiac surgery, in comparison with GP or outpatient attendance. The public do want community based services such as their general practitioner to be nearby, similarly to frequently purchased consumer items such as bread. However, consumers are willing to travel on average more than one hour for secondary healthcare such as cancer treatment, particularly when the healthcare provided is of high quality. No longer should pressure be applied to maintain all local healthcare services at the expense of providing regional services of high quality. We encourage the HSC review panel to focus on the provision of high quality health and social care regardless of vocal opposition and suggest that implementation of a quality focussed system would meet the approval of the Northern Ireland population.

Table 2.

Acceptable travel time for healthcare and consumer items of varying quality.

	Average quality "Item" Travel time*	High quality "Item" Travel time*
Cardiac surgery	3.29	3.60
Clothes for a special occasion	3.05	3.20
Cancer treatment	2.98	3.56
Large household appliance	2.72	3.05
Television	2.67	2.96
Outpatient clinic	2.45	2.99
Accident and Emergency	2.38	2.96
Sick children	2.21	3.19
GP	1.92	2.59
Bread	1.16	1.48

Travel time was assessed using a Likert scale from 1-4 corresponding to the travel times below

1	2	3	4
0-15 minutes	15-30 minutes	30-60 minutes	more than 60 minutes

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REFERENCES.

1. Northern Ireland. Department of Health. Donaldson SL, Rutter DP, Henderson DM. The right time, the right place. An expert examination of the application of health and social care governance arrangements for ensuring the quality of care provision in Northern Ireland. Belfast: Department of Health; 2014.

2. Mold A. Patient groups and the construction of the patient-consumer in britain: an historical overview. *J Soc Policy*. 2010; 39(4):505-21.

ASSEMBLY OF SUCTION APPARATUS. AN ACQUIRED SKILL?

Editor,

Suction is an important aid in airway management. Correct assembly of the suction particulate trap apparatus is a pre-requisite for obtaining sufficient vacuum.[1,2] We sought to determine if the assembly of suction apparatus is an acquired

skill or a self-explanatory process. We also assessed if more recent apparatus used in hospitals in Northern Ireland can be assembled quicker. If the assembly of suction apparatus can be demonstrated to be an acquired skill then there may be indication for formal instruction to aid development of this skill by medical staff.

Our null hypotheses were:

1. If suction particulate trap assembly is a self explanatory process that does not require development of a specific skill then the time taken for senior doctors to assemble each apparatus should equal that for junior doctors.

2. The older Sep-T-Vac apparatus (Figure 1, panel A) is as easy to set up as the newer Vacsax apparatus (Figure 1, panel B)

One-way ANOVA test showed a significant difference between grade of doctor, irrespective of apparatus, which rejects the first null hypothesis ($p<0.05$). The Mann-Whitney test showed a significant difference between each apparatus with the Vacsax apparatus taking a significantly short time to set up in most instances ($p<0.05$).

Conclusion

The study showed that there is a significant difference between the times taken for the junior and senior doctors to correctly assemble the suction apparatus. This indicates that assembly is an acquired skill rather than a self explanatory process. We also conclude that it is easier to assemble the Vacsax apparatus and that hospitals should adopt this newer model.

Table 1

Grade of Doctor	Sep-T Vac Times of individual doctors (seconds)						Mean
	A&E		ENT		Anaesthetics		
Consultant	33	37	26	30	21	50	33
Registrar	77	160	34	57	48	67	74
SHO	79	115	30	125	98	127	96

Table 2

Grade of Doctor	VacSax Times of individual doctors (seconds)						Mean
	A&E		ENT		Anaesthetics		
Consultant	23	20	14	22	35	18	22
Registrar	19	19	17	18	17	24	19
SHO	27	38	30	25	32	34	31

Method

Six consultants, six specialist registrars and six senior house officers from three specialties involved in airway management were timed as they assembled a Sep-T-Vac suction particulate trap. The same method was applied for the Vacsax apparatus using different doctors with equivalent seniority. Doctor selection was random and was dependent on doctors who were available on the day of the study. Doctors had no previous training on apparatus assembly.

Results

For the Sep-T-Vac apparatus, the assembly time for the most senior grade is approximately one third of that taken by the most junior grade. Specialist registrars averaged the fastest times for the assembly of the Vacsax apparatus. The average times in all grades were faster for the Vacsax apparatus. The numbers in the study are too small to allow comparison between the specialties.

Fig 1. Sep-T-Vac apparatus (panel A) & Vacsax apparatus (panel B)

Assembly of suction apparatus is not straightforward and individual hospitals should consider formal instruction on the assembly and mechanism of action of their particular model.

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REFERENCES

1. Carpenter A, Glenn L. Emergency suction equipment: barriers to use and effective interventions. *BMJ Qual Improv Report* 2013;**2**
2. National Patient Safety Agency (NPSA): Airway suction equipment patient safety. Signal. Reference No. 1309. Redditch, England: NPSA; 2011. Available online at: http://www.nrls.npsa.nhs.uk/resources/?EntryId45=94845. Last accessed October 2016.

TWO CONSULTANT SPINAL OPERATING: OPERATOR PERCEIVED BENEFITS

Editor,

There have been few documented studies looking at joint consultant spinal operating.[1-3] Within the Royal Victoria Hospital, it is routine for spinal consultants to operate in pairs for complex cases. The benefits of joint operating to either the patient or the surgeon are however unclear.

As a result, a study was undertaken to determine if participating surgeons felt there was any perceived benefit for either the surgeon or the patient. From the 27th September 2011 to the 26th September 2013, there were 43 documented joint consultant spinal operating cases at the main Royal Victoria Hospital site.

19 (44.19%) spinal stabilisation or fusion at any level.

18 (41.86%) Scoliosis operations.

6 (13.95%) Other (including tumour biopsy, wound wash out and kyphoplasty)

Q 1: Have you ever been involved in a joint consultant procedure?

Y/N

Q 2: If so, do you feel joint consultant operating is beneficial?

Y/N/NA

Q 3: What cases do you feel should be done/would like to do on a joint consultant basis?

- Complex spinal stabilisation or fusion at any level
- Posterior scoliosis correction
- Posterior fusion scoliosis
- Revision of Scoliosis fixation
- Complex spinal tumour operations
- Complex decompressions
- ACDF
- Free txt response

Q 4: What do you feel are the benefits of joint consultant operating?

- Shorter anaesthetic time
- Less blood loss
- Shorter stay in hospital
- Fewer post-operative complications
- Free text response

Q 5: Any other comments

Figure 1.

To assess if there was any operator perceived benefit, a 5 Question Survey was compiled. This was then sent to 300 Consultant Spinal Surgeons within the UK. A reply was received from 111 Consultants. Results were collated and both qualitative and quantitative data assessed (Fig.1).

The survey demonstrated that 94.50% had been involved in joint consultant operating and 93.64% felt that joint operating was beneficial. It was found that more complex and rarely performed cases were favoured for joint consultant surgery. A few responses, however, stated that consultants should be able to perform these operations by themselves. Although this is true the potential benefits for the patient would encourage joint operating.[1]

The perceived benefits for the patient included shorter surgery time, less blood loss and fewer post-operative complications. The perceived benefits for the surgeon included less stress with shared responsibility and experience. (Fig. 2)

Some Q 3 Free Responses

"Needed for any procedure if there is any concern or (if someone) is new to the team"

"Cases where there is significant risk of neurological loss".

Some Q 4 Free Responses

"Pooling of expertise/Combined thinking".

"Better legal position if patient develops complications".

Some Q 5 free responses

"it may impact negatively on the training of registrars".

"This is particularly important now as new consultants have little unsupervised pre-consultant operative experience".

"Should be considered… during the first year of new consultant appointments to ensure smooth transition into consultant practice".

Figure 2.

Conclusion: We believe joint consultant operating is an essential practice and should be used to share knowledge, increase skills and impact positively on patient outcomes. We also believe that this will be true for other surgical specialities. The survey analysis indicated that joint consultant operating is perceived by surgeons to be beneficial for both patient and surgeon. Conversely, there was some concern over registrar training, as opportunities to scrub would not be so readily available. Our feeling however is that actual operating time for the registrar is far outweighed by the invaluable

knowledge gained by assisting two consultants.

Research into this area has shown a reduction in operative blood loss, decreased stay in hospital and a reduction in complication rate.[1, 3] A local study, quantifying outcomes from single and joint consultant operating needs to be undertaken to determine if there is any actual benefit to either the surgeon or the patient.

The authors state that no funding was received to produce this study.

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REFERENCES

1. Perioperative Outcomes and Complications of Pedicle Subtraction Osteotomy in Cases With Single Versus Two Attending Surgeons. Christopher P. Ames, Jeffrey J. Barry, Sassan Keshavarzi, Ozgur Dede, Michael H. Weber and Vedat Deviren. Spine Deformity Volume 1, Issue 1, 2013, Pages 51-58
2. Placement of thoracic transvertebral pedicle screws using 3-D image guidance. Eric W. Nottmeier and Stephen M. Pirris. Journal of Neurosurgery: Spine. Volume 18, 2013, Pages 479-483.
3. The Seattle Spine Team Approach to Adult Deformity Surgery: A Systems-Based Approach to Perioperative Care and Subsequent Reduction in Perioperative Complication Rates. Rajiv K. Sethi, Ryan P. Pong, Jean-Christophe Leveque, Thomas C. Dean, Stephen J. Olivar and Stephen M. Rupp. Spine Deformity. Volume 2, Issue 2, March 2014, Pages 95–103