



QIP Free Papers

10:30 – 12:00

Hall 3B

149

WINTER PRESSURES IN THE NATIONAL HEALTH SERVICE - A PATIENTS' PERSPECTIVE

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Objectives: 1. Identify patients' concerns regarding procedure cancellations 2. Find out who patients hold responsible for procedure cancellations.

Study Design and Methods: A total of 80 patients awaiting elective procedures were identified and interviewed between 1st November 2017 and 29th March 2018. Interviews were structured using a pre-set questionnaire and all patients were interviewed by the presenting author.

Results: All 80 patients approached agreed to take part in the process. Elective procedures included in equal numbers were total hip arthroplasty, spinal decompression +/- discectomy +/- fusion, cataract surgery and laparoscopic cholecystectomy. The mean age was 64.2 years (range 26 - 96). Males and females represented 52.5% (n = 42) and 47.5% (n = 38) respectively. Almost two thirds of patients were still in employment and 21.3% (n = 17) were self-employed; 71.7% of patients reported taking time off work in the preceding 12 months.

Only 60% (n = 48) of patients were pre-warned about possible cancellations at time of clinic appointment. When asked what concerns they had other than disease progression; 77.5% (n = 62) of patients worried about higher complications rates, 90% (n = 72) were worried about logistics including care arrangements and time off work and 21.3% (n = 17) of patients were concerned about holidays booked. Patients held the surgeon responsible for the cancellations in 83.8% (n = 67), hospital management in 13.8% (n=11) and the government in 2.5% (n = 2). A whopping 92.5% of patients preferred to be told about the cancellation by their surgical team and not nursing or management staff.

Conclusions: The vast majority of patients held the surgical team responsible for cancellations. Patients worry about their disease progressing and potential complications. Patients prefer to be informed by the surgeon/surgical team of their cancellations. Patients also need to be made aware of the position and limited influence of the surgeons and the hospitals.

Disclosure: Nothing to disclose

326

CAN YOU TELL YOUR RECONSTRUCTION PLATE FROM YOUR DCP? INCORRECT PLATE CHOICE FOR FOREARM FIXATIONS: A REVIEW OF NEVER EVENT CASES

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Background: Plate fixation of forearm shaft fractures is usually performed using dynamic compression plates (DCP). DCP design varies depending on the manufacturer. Some DCPs have a similar appearance to the weaker reconstruction plates, which can often be found on the same set. Confusion between the two may result in forearm fractures being fixed with the wrong plate, which may lead to failure. Such cases would be classed as "never events". We hypothesised that the risk of incorrect plate selection is poorly appreciated and so performed a case-series review to identify the frequency of this error.



Methods: A retrospective case review was performed of 95 consecutive patients who had undergone plate fixation of the forearm since 2007 in a single hospital. The actual plate used, as seen on post-operative radiographs, was correlated with the intended plate, as documented in the operation note.

Results: In seven patients (7%), all treated by separate senior surgical and experienced orthopaedic scrub teams, reconstruction plates were used inadvertently instead of the intended DCP. Three patients came to no harm, one patient was lost to follow-up and three patients required revision surgery because of plate failure before union.

Conclusions: Even experienced surgeons are prone to selecting the wrong implant under the pressure of surgery. Recent changes in plate design might increase the risk of confusion between reconstruction plates and DCPs. An understanding of the human factors that can lead to incorrect selection of apparently dissimilar implants should reduce the risk of such errors in future. We advocate the removal of the less-used reconstruction plate from plating sets, as well as education of the differences between the reconstruction plate and DCP.

Disclosure: Nothing to disclose.

346

EVALUATION OF PHYSICIAN BURNOUT AT A MAJOR TRAUMA CENTRE USING THE COPENHAGEN BURNOUT INVENTORY

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Type of study: A cross-sectional observational study.

Background: Healthcare workers are susceptible to burnout owing to the demanding nature of their profession. The sequela of this is an increased incidence of medical errors and decreased job satisfaction. This study aimed to assess the degree of burnout among physicians of different grades and specialties in a Major Trauma Centre in England.

Methods: Copenhagen Burnout Inventory (CBI) was used in this study. One hundred and sixty-five staff doctors from four different medical specialties (emergency medicine, orthopaedics, general surgery, and acute medicine) working with acute admissions and from varying grades affiliated to our institution (Brighton and Sussex University Hospitals) were given the questionnaire via email and responses were received anonymously.

Results: The response rate was 77.57 % (n = 165). General surgeons had the highest total burnout mean score of 50.00 with an SD of 12.78 followed by emergency medicine with a mean of 46.47 and SD of 11.65, acute medicine with a mean of 46.13 and SD of 12.65, finally orthopaedics with a mean of 40.20 and SD = 13.57. Junior doctors had an overall score of 53.42 with a standard deviation of 5.21, followed by consultants (mean = 49.65, Sd = 10.74) and registrars (mean = 47.95, Sd = 9.67). The total burnout scores showed that 7.0 % (n = 9) had low burnout scores while 56.3 % (n = 72) had moderate burnout and 36.7 % (n = 47) had high burnout scores (ie mean above 50). A two-tailed P test revealed a statistically significant difference between the work-related and patient-related subscales (P < 0.0001).

Conclusions: Ninety-three percent of responders demonstrated either moderate or high levels of burnout in this study. Work-related factors appeared to contribute more to occurrence of burnout rather than the patient-related or doctor-patient interactions.

Disclosure: Nothing to disclose.



376

DAY SURGERY KNEE ARTHROPLASTY PATHWAY

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Background: The number of patients undergoing arthroplasty is on the rise. It is well known that the length of stay has an influence on the mortality and morbidity of patients undergoing these procedures. There has been a trend to reduce this length of stay by introduction of “enhanced recovery pathways” / “fast tracking”, which have proved successful. Naturally, the next step would be to consider arthroplasty as a day surgery procedure. We investigated the practical aspects of this by selecting patients for day surgery knee arthroplasty and looked into their early outcomes.

Methods: Twenty-four patients were prospectively selected for uni / total knee arthroplasty as a day procedure. They were all pre-assessed based on a “day surgery knee arthroplasty” selection criteria, pre-discussed with the anaesthetist and the lead surgeon.

They all came on the morning of their surgery and were discharged the same day, after physiotherapy and nursing goals had been achieved. The procedure was carried under a regional anaesthetic and the patients underwent a standard surgical procedure. We checked with hospital records and NHS data at local hospitals to check readmissions.

Results: All 24 patients were discharged the same day. There were 16 males and eight females. Nine patients underwent unicompartmental knee replacements and 15 underwent total knee replacements. We assessed their post-operative progress, Length of Stay and readmission rates.

Only two patients had minor post-surgical issues which were dealt with by the nursing team. None of the patients required readmission.

Conclusions: “Day surgery knee arthroplasty” is an evolving concept which should increase patient compliance without undue risks and reduce the financial pressure on the healthcare sector for a selected group of patients. We have demonstrated it is both a safe and practical concept and can be adopted routinely for our patients.

Disclosure: Nothing to disclose.

392

SHOULD RADIOGRAPHS BE FORMALLY REPORTED BEFORE THE VIRTUAL FRACTURE CLINIC?

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Introduction: The virtual fracture clinic (VFC) model aims to achieve consultant review of all trauma patients within 72 hours from presentation, as per the British Orthopaedic Association standards for trauma (BOAST). Reducing the time to consultant review has highlighted other issues which may have implications on patient safety. Reporting of all trauma radiographs by a radiologist or specially trained reporting radiographer before VFC review is not consistently achievable. The Care Quality Commission identified no national key performance indicators regarding time to reporting of trauma radiographs. The aim of our study was to assess the safety of discharging a patient after a VFC review in the absence of a formal radiology report.



Methods: All patients who were seen in the VFC between 1st December 2018 and 4th January 2019 were included in this prospective study. The patients who did not have a formal radiology report at the VFC review were noted. Subsequently, their notes and radiology reports were analysed for discrepancy between the VFC diagnosis and the radiology report and whether the management would have been altered by the report.

Results: Five hundred patients were included in this study. All patients were reviewed by orthopaedic consultants. One hundred and ninety-six (39.2%) patients did not have a radiology report at the time of the VFC review. Among the patients discharged from the VFC, 63 patients (32%) had no radiology report. Within this subgroup, only one patient (0.5%) had a subsequent formal report with positive findings that needed further management.

Conclusions: We conclude that the VFC is a safe and effective way of managing the high volume of trauma patients referred for senior orthopaedic review.

Implications: Patients can be safely discharged from the VFC in the absence of a formal radiology report, if the radiographs have been reviewed by an orthopaedic consultant.

Disclosure: Nothing to disclose.

399

PAEDIATRIC FOREARM FRACTURE MANIPULATION: ED OR THEATRE?

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Background: Manipulation of paediatric forearm fractures is routinely carried out in the operating theatre however research demonstrates that manipulation in ED can be safe and effective, minimising the need for a general anaesthetic and admission whilst expediting definitive treatment. A new "paediatric forearm fracture protocol" was developed to guide management in the ED and in doing so provide improved care for paediatric patients.

Methods: A protocol was developed with ED, orthopaedic, anaesthetic and paediatric input. Children presenting to ED with a mid-shaft or distal ulna or radius fracture were audited following introduction of the protocol over a five-month period. In addition to clinical parameters and treatment costs, multi-source survey data was collected to characterise patient and parent experience of manipulation in ED as well as staff attitudes.

Results: Ninety-five patients were identified with forearm fractures of which 11 (11.6%) required either manipulation or surgical intervention. Five fractures were manipulated in ED with a successful reduction achieved in 80% of cases. Average length of stay in hospital for patients who underwent manipulation in ED was < 1 day versus > 1 day in the manipulation in theatre group.

Patient/parent feedback surveys demonstrated positive patient satisfaction post procedure (mean satisfaction 9.3/10) as well as satisfactory reduction in pain scores.

Completed staff surveys showed an overall positive attitude to the new protocol but highlighted barriers to implementation including a perceived lack of team-working between doctors and nurses, patient distress and inability of patients to use Entonox.



500

VIRTUAL FRACTURE CLINIC - THE MID CHESHIRE HOSPITALS NHS FOUNDATION TRUST PATIENT EXPERIENCE

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Background: In 2016, NICE called for research comparing virtual fracture clinic (VFC) to the traditional face-to-face fracture clinic model. The Mid Cheshire Hospitals NHS Foundation Trust serves approximately 300,000 people. In 2014 to 2015 its fracture clinic saw 5577 new and 7085 follow-up appointments. Our aim was to evaluate the patient reported experience pre- and post- VFC introduction in October 2017.

Methods: Two surveys were run, round one before VFC was introduced and round two after. In round one a 27-part questionnaire was developed with the hospital's patient experience team, 60 patients completed this. The business case for a consultant-led VFC service was proposed and in October 2017 VFC was introduced. Following this in round two 46 patients completed a questionnaire to re-evaluate and close the audit loop of this quality improvement project. Round two was conducted four months after the introduction of VFC, targeting patients who had experienced VFC management for their initial appointment and who had had subsequent face-to-face review.

Results: Round one found that 80% of patients spent between £5 - 15 on their journey to hospital. Forty-five percent were not seen on time, with 10% waiting more than 45 minutes. Forty-three percent of patients had to take time out of work to attend appointments. Round two analysis found that over 50% of those responding to the question found there were benefits to having a VFC appointment for their first appointment.

Approximately only a quarter of people would have preferred their VFC appointment to have been a face-to-face one. Nearly 80% of patients rated their overall experience as eight or more out of 10 and 94% would recommend Leighton's fracture clinic to friends/ family as compared to 80% in round one.

Conclusions: VFC has been well received by patients in this District General Hospital setting.

Disclosure: Nothing to disclose.

871

ORTHOPAEDIC TRAINEES' PERCEPTIONS OF THE EDUCATIONAL VALUE OF DAILY TRAUMA MEETINGS

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Background: The daily orthopaedic trauma meeting is considered to serve a dual purpose; a way of discussing management of trauma patients and as a forum for teaching with an assumed educational benefit. The primary aim of this study was to explore orthopaedic trainees' perspectives on the educational value of trauma meetings and identify factors that influence educational benefit.

Methods: An online survey was created after discussion with the BOA educational adviser and pilot testing. Orthopaedic registrar trainees with a national training number within England were emailed the survey, which was completed via the BOA website. Results were analysed using thematic analysis and online survey software.

Results: One hundred and fifteen responses were recorded from ST3 to post-CCT trainees nationally within England. Seventy-three percent of trainees found the trauma meeting to be educationally "valuable" or "very valuable". However, 90% of trainees felt the primary focus of the meeting was for service provision. Sixty-one percent of trainees reported that the meeting "rarely" or only "sometimes" helped identify deficiencies in knowledge requiring improvement.



Positive perceived educational factors included the discussion of complex cases, consultant deliberation on patient management and trainees being questioned or engaged in discussions by consultants in a constructive manner. Negative factors involved time pressures, an aggressive and critical atmosphere and disorganised meetings. Trainee suggestions for improvement included a more supportive atmosphere conducive to learning, incorporation of a structured daily teaching case and daily review of post-operative radiographs.

Conclusions: This is the first nationwide study providing a detailed insight into factors that influence the educational value of the trauma meeting. This study reveals positive and negative factors that affect trainee learning and suggests improvements directly sourced from trainees.

Implications: Recommendations from this study can be applied to orthopaedic departments nationally, serving as a guide for positive change to maximise educational benefit for trainees during trauma meetings.

Disclosure: Nothing to disclose.

883

LUMBAR SPINE RADIOGRAPH – IS IT TIME FOR NATIONAL ADOPTION OF THE PA PROTOCOL?

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Background: Conventionally, lumbar spine radiographs are performed in AP projection. There is evidence from phantom and patient studies of up to 53% effective dose reduction when lumbar spine radiographs are acquired PA instead of AP. Since November 2017, Taunton and Somerset NHS Foundation Trust has acquired all standing lumbar spine radiographs PA. The aim of this study was to locally evaluate dose and image quality both before and after the change in practice and survey current national practice.

Methods: Eighty outpatients between 60 - 100kg having a standing lumbar spine radiograph (40 AP; 40 PA) had their dose area product (μGym^2) recorded at a constant KV (80mV) and focus film distance (110 cm). Effective dose (mSv) was calculated using PCXMC software. Each blinded radiograph was scored by two consultants against an optimal reference image using the European guidelines criteria. The data were analysed using Mann-Whitney-U tests and linear regression. Eighty radiologists nationally were sent an anonymous survey to establish their current practice.

Results: A lumbar spine radiograph acquired PA instead of AP reduced effective dose by 41% ($p < 0.001$) with no difference in image quality ($p = 0.9$). Twenty-one radiologists completed the survey (26% response) and only one NHS Trust is currently using PA.

Conclusions: Standing PA lumbar spine radiograph reduces patient's radiation risk without affecting the image quality, acquisition time or investigation cost. The majority of NHS Trusts nationally are still performing this investigation AP and it's time to standardise to PA with its associated benefits.

Disclosure: Nothing to disclose.