

supervision given. We will make a simple teaching video addressing these issues to improve clinical skills and maintain standards of care.

### 0306: THE MORTALITY OF PATIENTS ADMITTED WITH HIP FRACTURE AND CONSOLIDATION ON CHEST RADIOGRAPH

T. Paavana<sup>1</sup>, M. Lee<sup>2,\*</sup>, H. Elphick<sup>1</sup>. <sup>1</sup>Northern General Hospital, UK; <sup>2</sup>Scunthorpe General Hospital, UK

**Aim:** To ascertain the mortality of patients admitted with hip fracture and consolidation on chest radiograph

**Methods:** Patients over 70 admitted with fractured neck of femur (NOF) during December 2013–April 2014 were identified from the National Hip Fracture Database (NHFD). Inpatient falls and pathological fractures were excluded. Admission chest radiographs were reviewed to identify those with radiological evidence of possible community acquired pneumonia (CAP). Nottingham Hip Fracture Scores (NHFS) and in-hospital mortality were identified from the NHFD.

**Results:** From a total of 171 patients, 13 (7.6%) died during admission, of which 6 (46%) were found to have consolidation suggestive of CAP on admission radiograph, as opposed to only 13 (8.2%) in the surviving group. There was a highly significant difference between the two groups (Fisher's exact  $p = 0.0027$ ). Further analysis showed that as predictor of mortality, consolidation on admission radiograph had a sensitivity of 0.26 (0.11–0.48), and specificity of 0.95 (0.9–0.97). Positive likelihood ratio of death was 5.55 (2.04–15.06).

**Conclusion:** For the elderly NOF population, a radiograph suggesting CAP at admission is a highly specific but poorly sensitive predictor of mortality. This may aid clinicians in estimating patient outcomes. Prompt orthogeriatric assessment and treatment of these patients is recommended.

### 0307: TIP-APEX DISTANCE IN DHS FIXATION: THIRD AUDIT CYCLE

J. Hornsby<sup>\*</sup>, S. Borland. *University Hospital of North Durham, UK*

**Aim:** The tip-apex distance (TAD) in dynamic hip screw (DHS) fixation has been shown to predict failure of the procedure by “cut out” of the lag screw. The standard is for TAD to be less than 25 mm in all cases. This standard was used to audit practice at this centre in 2007 and 2011, with educational interventions following each cycle. This is a re-audit to ensure improvement in practice.

**Methods:** The antero-posterior and lateral intraoperative radiographs of all dynamic hip screws in a single centre between January and June 2014 were reviewed. A minimum follow up of three months was used to record any failure of the procedure. The results were compared to the previous audit cycles.

**Results:** Sixty one patients underwent dynamic hip screw fixation in the study period. The mean TAD was 15.6 mm (range 6.2 mm–26 mm). Three cases (4.9 per cent) had a TAD > 25 mm. Fifty one cases (83.6 per cent) had a TAD < 20 mm. There was one failure by “cut out” of the lag screw. This demonstrated improvement since the previous cycles.

**Conclusions:** Educational programmes following audit increases awareness of standards for TAD among orthopaedic surgeons and can therefore improve outcomes.

### 0358: IMPROVING THE ACCURACY OF CODING IN DUPUYTREN'S SURGERY: A FULL AUDIT CYCLE

P. Robinson<sup>1</sup>, M. Khan<sup>1,\*</sup>, K. Patel<sup>1</sup>, M. Wijeratna<sup>2</sup>, J. Jones<sup>1</sup>. <sup>1</sup>Peterborough and Stamford Hospitals NHS Foundation Trust, UK; <sup>2</sup>Nottingham University Hospitals NHS Foundation Trust, UK

**Aim:** To improve coding accuracy in Dupuytren's contracture surgery.

**Methods:** Case notes of patients who had undergone a Dupuytren's procedure were retrospectively reviewed and the operation notes were compared with the HRG code generated for that episode of care.

In the initial audit the accuracy of coding was poor, particularly in distinguishing between palmar fasciectomy and digital fasciectomy. There is a large difference in tariff between these (£2436 versus £5353).

Recommendations were made to increase the use of typed operative notes and to use clearer operation titles.

A re-audit was conducted of 55 consecutive procedures.

**Results:** In the initial audit 74 primary palmar and digital fasciectomies were performed. 26 (35%) had a typed operation note. 35 (47%) were correctly coded.

In the re-audit 60% of operation notes were typed. There were 33 primary procedures; 25 (76%) of procedures were correctly coded in terms of palmar versus digital fasciectomy. This represented a statistically significant improvement in coding accuracy ( $p = 0.0067$ ; Fisher's Exact Test).

**Conclusion:** By increasing the use of typed operation notes, using clearer operation titles and by engaging with the clinical coding department we have significantly increased the accuracy of coding and therefore our hospitals remuneration for Dupuytren's procedures.

### 0365: THE QUALITY OF ONLINE PATIENT-ORIENTATED INFORMATION IN ORTHOPAEDIC SURGERY: A SYSTEMATIC REVIEW OF CROSS-SECTIONAL STUDIES

M. Ramsden<sup>\*</sup>, L. Sivakumar, H. Milligan, I. Zahid, P. Addingadoo, A. Sergiou, S. Shantikumar. *University of Warwick, UK*

**Aim:** Many studies have assessed the quality of online information relating to individual aspects of orthopaedic surgery, but to date there has been no systematic evaluation of this evidence. We performed a systematic review of studies evaluating the quality of online information relevant to orthopaedic surgery.

**Methods:** We systematically searched PubMed and EMBASE, up to December 2014, for studies that browsed the web for information on orthopaedic conditions and evaluated at least one aspect of the quality of retrieved websites. All search results were screened independently by two authors, with good interobserver reliability ( $k = 0.84$ ).

**Results:** Of 1704 citations screened, 22 were included. These evaluated 2194 webpages relevant to orthopaedic surgery. The most frequently assessed aspects were completeness of information ( $n = 17$ , 78%), accuracy of information ( $n = 16$ , 72%) and readability ( $n = 7$ , 32%). Although there was large heterogeneity in the criteria used to assess website quality, 19 studies (86%) suggested that the quality of orthopaedic information provided on the web was inadequate.

**Conclusion:** Systematic evaluation across a range of orthopaedic conditions found a high prevalence of inaccurate and incomplete information on the web. Surgeons should be aware that patients may be reading misleading information, and consider signposting them to more appropriate reading material.

### 0400: INTRAVENOUS FLUID RESUSCITATION IN NECK OF FEMUR PATIENTS: RETROSPECTIVE STUDY 2014

F. Ibram<sup>\*</sup>, J. Fountain, U. Alao. *Aintree University Hospital, UK*

**Aim:** Acute kidney injury (AKI) is associated with poor post-op prognosis in patients with neck of femur (NOF) fractures, highlighting the importance of adequate peri-operative fluid resuscitation. The aim of this study was to assess fluid prescription practices in NOF patients at our institution.

**Methods:** Retrospective study of NOF patients >65 years admitted between April & May 2014. Data was collected from notes, EDMS, and Sigma. Adherence protocols from an audit completed in 2007 were used as audit standards as well as timelines of fluid prescription and administration.

**Results:** Forty patients presented with NOF fractures in this study. Mean age was 81 (range: 65–92). Mean Nottingham Hip Fracture Score was 6 (range: 2–8). There was significant improvement in commencing intravenous (iv) fluids in A&E (82% vs 53%) compared with the previous study, however only 39% of iv fluids prescribed were according to protocol and of those, 83% were administered. None were administered correctly, mainly attributed to poor documentation. 20% of patients developed AKI post-operatively.

**Conclusion:** Whilst progress has been made towards commencing iv fluids in A&E, there is room for improving accuracy of prescription and administration. This can be achieved through staff education and revision of the current NOF protocol.