PostScript

LETTERS

Dictated versus hand-written accident and emergency discharge documents

New attendances at emergency departments in the UK continue to increase. There were 11.3 million new attendances in 1981, rising to 16 million in 1999.¹ Combined with the government's drive to reduce waiting times, this has resulted in considerable strain being placed on doctors to see, treat and discharge or admit patients quickly, while maintaining accurate records.

One method suggested to reduce doctors' time spent on administration is for discharge documents to be dictated rather than hand-written for all patients sent home directly from the emergency department.

We performed a pilot study assessing whether there was any variance in the quality and content of hand-written versus dictated accident and emergency discharge documentation between two sites in National Health Service Fife. The senior health officers of the accident and emergency department work between the two sites, and facilities for dictation are only available at one of these. This allowed for comparison while eliminating inter-doctor variance. A total of 372 discharge documents were assessed for legibility, the presence or absence of formal diagnoses, investigation results, analgesia given and outcome (discharged, referred or admitted). Dictated documents were superior in every category. Legibility was a particular problem, with 6.6% of hand-written documents being largely illegible. Diagnoses were more often present in dictated records (88% v 69.7%; $p < 0.01$), and, when present, were more often highlighted or obviously located (84% v 44.3%; $p < 0.01$). Radiology results (90% v 81%), analgesia given (100% v 91.7%) and outcome (92% v 86.1%) were also disparate, although these did not achieve statistical significance.

With other studies showing that dictation is faster, improves doctor's satisfaction and departmental productivity,² and that their quality is less adversely affected by increased workload,³ we think this is an area that deserves further attention and hope to conduct a larger-scale study in the near future.

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The trauma room: a "one-stop shop" for diagnosis and treatment?

Time taken to complete diagnostic tests and initiate definitive treatment, the "golden hour" of Cowley,¹ is frequently mentioned in the care of seriously injured patients. Surgical care during the first hour is of utmost importance to increase the patient's chances of survival.¹ The availability of the multislice computed tomography (MSCT) enables a complete diagnostic assessment of injured patients in 90-240 s, but is presently carried out only at the end of basic diagnostics. We investigated the effects of a clinical algorithm (fig 1) using MSCT scanning before other measures in the clinical care of seriously injured patients.

In 2004, 139 patients were treated in the trauma room according to the above-mentioned procedure. The mean age of the patients was 42.2 years and the mean Injury Severity Score was 26.93. In all, 12 (8.6%) patients died. The length of stay in the trauma room was markedly reduced from 87 (our data from 2000-1) to 38 min (standard deviation (SD) 19.1 min) on average. The mean duration of complete computed tomography diagnostics (native head computed tomography and contrast medium-supported whole-body computed tomography) was 4 (SD 5.71) min. Diagnostics were completed an average of 13 (SD 8.4) min after arrival of the patient.

Care of seriously injured patients must be carried out as rapidly as possible, and reducing the time needed for clinical care is always

desirable. Rapid computed tomography scanning is sensible and practical. Rapid and complete initial diagnosis by computed tomography markedly reduces the duration in the trauma room, and should considerably improve clinical outcomes. Life-threatening injuries are identified in a matter of minutes and appropriate treatment is initiated. A prerequisite for the use of the concept introduced is the integration of an MSCT into the trauma room, transforming it into a "one-stop shop" for diagnosis and treatment.

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Reference

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Intravascular haemolysis due to glucose-6-phosphate dehydrogenase deficiency in a patient with aluminium phosphide poisoning

Aluminium phosphide (ALP) poisoning and glucose-6-phosphate dehydrogenase (G6PD) deficiency are two commonly seen clinical presentations in northern India.^{1,2} However,

Figure 1 Effects of a clinical algorithm. CT, computed tomography.

haemolysis associated with ALP poisoning is very rare, reported previously in only two cases in the literature.^{3,4} Herein, we report a patient with ALP poisoning presenting with intravascular haemolysis secondary to G6PD deficiency.

A 22-year-old man presented to the emergency department with nausea, epigastric distress, vomiting and cola-coloured urine after intentional ingestion of one tablet of ALP. He denied taking any other drug or intoxicant. On admission, he was fully conscious, icteric, normotensive, with mild tachycardia. His breath had a strong garlic odour. The rest of the physical examination was unremarkable. The urine sample obtained was deep brown. The electrocardiogram showed only sinus tachycardia. Arterial blood gases and renal functions were normal. His liver-function tests showed unconjugated hyperbilirubinaemia with no transaminitis, and normal alkaline phosphatase. A peripheral smear obtained showed spherocytes, Heinz bodies and occasional degmacytes. The plasma haemoglobin level was raised at 64 mg/dl and the corresponding urine haemoglobin level was 12 mg/dl. Ultrasound examination of the abdomen showed normal hepatobiliary system and mild splenomegaly. A G6PD assay obtained at presentation showed deficient activity. He was managed with Ryle's tube lavage, aggressive fluid rehydration, sodium bicarbonate and magnesium sulphate. He improved clinically (bilirubin decreased from 9.8 to 4.2 mg/dl) and was discharged after a psychiatric evaluation, family screening and appropriate advice regarding G6PD deficiency.

ALP is a solid fumigant pesticide which acts by liberating phosphine gas (an oxidant), and thus can cause haemolysis in persons with G6PD deficiency.^{3,4} ALP by itself can cause haemolysis⁴ and also secondary to metabolic acidosis related to hypotension, cardiogenic shock, renal failure, seizures and hepatotoxicity. Haemolysis in ALP poisoning is rare despite the common presence of G6PD deficiency, possibly owing to cardiogenic shock and death supervening before clinically evident haemolysis; mild haemolysis is missed in the face of overwhelming systemic toxicity and the presence of less severe variants of G6PD in northern India, where ALP poisoning is common.¹ In conclusion, although haemolysis is a rare presentation in ALP poisoning, detection of associated G6PD deficiency is imperative because of its attendant implications.

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Implementation of the sepsis resuscitation bundle: early experiences in a district general hospital

Mortality from severe sepsis remains unacceptably high at around 30–50%.¹ Globally about 1400 people die each day from sepsis-related illness. The Surviving Sepsis Campaign was introduced in an attempt to improve the diagnosis and management of severe sepsis. Its aims include a commitment to reduce global mortality from severe sepsis by 25% within 5 years (www.survivingsepsis.com). One method of achieving this mortality reduction is by the local implementation of the

sepsis-care bundle, a series of evidence-based interventions shown to improve outcome in patients with sepsis.²

We recently began a pilot campaign to implement the sepsis-care bundles in accident and emergency departments. We devised sepsis-bundle pathways and protocols, and spent considerable time educating the appropriate clinical and nursing staff in their use. We then audited the success of our implementation process in the hope of identifying any problems that may benefit other institutions going down the same road as ourselves.

Our audit was carried out over a 3-month period in early 2006, in our busy accident and emergency department at the district general hospital. During this time, we noted that 16 patients were entered into our pathway (fig 1). Disappointingly, of these 16 patients, only four had all the recommended investigations and interventions completed. We then tried to identify the reasons for difficulties in implementing and adhering to the sepsis-bundle pathway.

In the busy accident and emergency department, more paperwork and another protocol to follow means more time spent with individual

Figure 1 Sepsis resuscitation-bundle pathway for accident and emergency departments. A&E, accident and emergency medicine; HDU, high dependency unit; ITU, intensive therapy unit; MAP, mean arterial pressure.