

Red flags in medical practice

Ellen Welch

The signs and symptoms of serious disease may be easily overlooked by the non-specialist in both primary and secondary care. This conference, organised by the British Geriatrics Society in conjunction with the Royal College of Physicians (RCP), presented the ‘red flags’ of some of the major medical specialties, while highlighting cases that may present atypically.

Rheumatology and geriatric medicine

The term ‘red flag’ was originally associated with back pain. The first catalogue of red flags for back pain appeared in the literature in the early 1980s and since then numerous lists have been compiled. The opening lecture of the day highlighted that red flags are a helpful concept, but can often have limited practical value. Henschke and colleagues¹ demonstrated a low sensitivity of the red flag questions in picking up serious causes of back pain, suggesting that clinical expertise trumps formulaic rules.

Falls in the elderly population are common, often multifactorial and misdiagnosis of the cause has implications for falls prevention. Injurious falls in particular should act as a warning for loss of consciousness.² Hospitalisation after falls in elderly patients with cognitive impairment puts them at high risk of developing delirium. Incident delirium can be reduced by 30% in such patients by addressing basic factors such as pain control, medications, sleep hygiene, cognitive stimulation, hearing, vision, mobility and hydration.

Detection of dehydration in elderly patients is difficult since the collagen changes of aging reduce skin turgor and lead to sunken eyes. Examination for axillary moisture is therefore a useful tool and a dry axilla is a red flag for dehydration.³ Hypoactive delirium is poorly detected in hospitals. Before labelling a patient as a ‘difficult historian’ the clinician should consider underlying delirium. Similarly, a ‘social admission’ may be a mask for a missed delirium or another medical problem in disguise. Certain behavioural symptoms, such as carphology (picking at bedclothes), can act as a marker of delirium. Failure to orient the body in line with the bed (known as a ‘positive oblique sign’) is a predictor of cognitive impairment⁴ and can be assessed quite literally at the bedside.

Respiratory and renal medicine

Crackles on the lung fields are typically indicative of pulmonary oedema – but remember to consider fibrosis. Similarly,

wheeze does not always indicate a diagnosis of asthma or chronic obstructive pulmonary disease (COPD), but can be a sign of heart failure or upper airway obstruction. Conversely, an absence of wheeze, and indeed a silent chest in a patient with asthma should not be reassuring, but a red flag for life-threatening disease.⁵ Acute kidney injury (AKI) is encountered by doctors in almost all admitting medical and surgical specialties. Its severity is based on serum creatinine and urine output (Table 1).⁶ Current and previous serum biochemistry results should be assessed for trends in the diagnosis of AKI, while urinalysis will provide an important window to potential causes. A full drug history should always be elicited (particularly metformin, but also omeprazole, which can cause acute interstitial nephritis).

Palliative care and general practice

Knowing when to act quickly, such as in cases of spinal cord compression (which necessitates a magnetic resonance image (MRI) within 24 hours, so that intervention can maintain existing function) is just as important in palliative medicine as knowing when to withdraw treatment. Rosemary Lennard advised us to unpick patients’ euthanasia requests as cries for help and to seek out what can be done to address any fears and concerns. An awareness of the practical, social input that can be provided to ease the suffering of such patients is essential.

Iona Heath focused her Lumleian lecture on care closer to home. She spoke of bringing the familiarity of home back into hospitals, when care cannot be provided in the community. Her red flags centred on the lack of humanity that can often be prevalent in modern hospitals – encompassed in infection control measures, such as the banning of flowers or sitting on

Table 1. Acute kidney injury classification. Reproduced with permission from BioMed Central.⁶

Stage	Creatinine criteria	Urine output
1	Increase in serum creatinine of >0.3 mg/dl (26.4 umol/l) or 1.5–2-fold increase from baseline	<0.5 ml/kg/hr for >6 hr
2	2–3-fold rise of serum creatinine from baseline	0.5 mg/dl (44 umol/l) >12 hr
3	>3-fold rise of serum creatinine from baseline or Serum creatinine >4.0 mg/dl (>354 umol/l) with an acute rise of at least	<0.3 ml/kg/hr × 24 hr or anuria × 12 hr

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This conference took place at the Royal College of Physicians (RCP) on 8 June 2010 and was organised by the British Geriatrics Society in conjunction with the RCP

patients beds (for which there is no evidence of spread of infection).

Gastroenterology and cardiology

Abdominal pain can often be labelled as functional if first line investigations are not fruitful. Care is needed to rule out alternative diagnoses. No symptoms have a reliable positive predictive value for ovarian cancer. However, in patients over 40 years of age with symptoms of abdominal bloating, pain and early satiety there should be a low threshold for computed tomography imaging, since such symptoms can present more than 12 months before a diagnosis of ovarian cancer.⁷

In younger patients with abdominal pain in association with a low sodium and hypertension, a rare but easy to diagnoses condition that should be considered is acute intermittent porphyria. Once treated, the disease is associated with an excellent prognosis but, if missed, may be fatal. Inflammatory bowel disease is associated with an increased risk of colorectal cancer and there

is evidence in favour of surveillance colonoscopy in patients with longstanding ulcerative colitis and colonic Crohn's disease. Patients who develop cancer under surveillance have less advanced disease and live longer.⁸

Red flags in cardiology include long QT syndrome (LQTS), a familial disorder characterised by prolongation of the QT interval on electrocardiogram (ECG) (>450 ms in males or 12 small squares on the ECG, >460 ms in females) It should not be missed as it has the propensity to lead to ventricular dysrhythmias and sudden cardiac death. Once identified, triggers for dysrhythmias should be avoided, and may include medications (chiefly antipsychotics), swimming or exercise and emotional stress. Beta blockers can be useful for long QT syndrome.

The 18-month mortality for a new diagnosis of heart failure is 57%.⁹ Patients with heart failure and interventricular conduction abnormalities who are receiving optimal pharmacological therapy may be candidates for cardiac resynchronisation therapy with a biventricular pacing device (CRT-P). Potential candidates are those with a bundle branch block, or those with a QRS duration of 120–149 ms and mechanical dyssynchrony.

Conference programme

Chair: Professor Graham Mulley, president, British Geriatrics Society

Rheumatology

Professor David Scott, King's College Hospital, London

Geriatric medicine

Professor John Young, Bradford Teaching Hospitals NHS Foundation Trust

Respiratory medicine

Professor Ann Millar, North Bristol NHS Trust

Renal

Dr Richard Fluck, Derby Hospitals NHS Foundation Trust

Palliative care

Dr Rosemary Lennard, Bradford Teaching Hospitals NHS Foundation Trust

LUMLEIAN LECTURE

Care closer to home – must the rhetoric always mean the opposite?

Dr Iona Heath CBE, president, Royal College of General Practitioners

Chair: Professor Paul Knight, West of Scotland Deanery

Gastroenterology

Professor Jon Rhodes, the Royal Liverpool and Broadgreen University Hospitals NHS Trust

Neurology

Dr Lionel Ginsberg, The Royal Free Hampstead NHS Trust, London

Diabetes

Dr Peter Winocour, East and North Hertfordshire NHS Trust

Cardiology

Dr Robert Sapsford, Leeds Teaching Hospitals NHS Foundation Trust

Neurology and diabetes

Headache has many manifestations. A thorough history is key to identifying warning signs such as sudden onset, occipital pain (consider a posterior fossa lesion), a diurnal pattern, crescendo headache; scalp tenderness; associated vomiting, fever or rash; and young obese female patients presenting with headache (consider idiopathic intracranial hypertension). Cauda equina syndrome is rare but missing the diagnosis has resulted in six figure medico-legal payments. Request an urgent MRI if there is back pain, bilateral sciatica, saddle sensory loss and bladder dysfunction

The Charcot joint (neuropathic arthropathy) should be considered in any neuropathic patient, especially those with diabetic neuropathy, presenting with erythema, swelling and elevated temperature of the foot. Early recognition of the acute Charcot foot, bed rest and involvement of the specialist foot care team can prevent future deformity and functional loss.

Glycaemic control becomes increasingly important in acute coronary syndrome (ACS). Even in patients not previously diagnosed with diabetes, an insulin infusion should be considered to obtain a target blood glucose range between 5–8 mmol/l. The 30-day mortality for patients without known diabetes mellitus, who had an admission blood glucose >11 mmol/l in association with a troponin positive ACS, was 16% in patients who received insulin, compared with 22% in those who did not.¹⁰

Conclusions

Recognising and managing 'red flags' in clinical medicine continues to present a major challenge. An extensive range of medical specialties were discussed during the conference, each emphasising distinct areas for attention. The collective theme throughout was to be watchful for warning signs and to remain vigilant for atypical presentations.

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Working party report

Oral feeding difficulties and dilemmas

A guide to practical care, particularly towards the end of life

Endorsed by the Association of British Neurologists, the British Association for Parenteral and Enteral Nutrition, the British Dietetic Association, the British Geriatrics Society, the Royal College of Nursing, and the Royal College of Speech and Language Therapists

Feeding is basic to life, but it can also be an artificial medical procedure in the power of health professionals. Sometimes it causes dilemmas and strong differences of opinion between patients, relatives and professionals. This report addresses these fundamental issues.

It acknowledges the confusion and uncertainty that sometimes surround decision making and practice, including the difficulties of carrying out some of the technical interventions involved.

The report provides evidence-based guidance on the mechanisms and techniques of oral and artificial nutrition in health and disease. It sets out the ethical and legal concerns that provide the framework for decision making. Case studies then illustrate dilemmas and solutions, for example on deciding whether to withhold or provide artificial nutrition.

This report is essential reading for all those involved in caring for people who have nutritional and oral feeding difficulties, including gastroenterologists, ward nurses, geriatricians, dietitians, speech therapists, neurologists, care home and community nurses, as well as carers, families and the patients themselves. ■

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