In this month’s QJM

This month’s review paper tackles a difficult but important topic: the occurrence of gastrointestinal bleeding (GI) after percutaneous coronary intervention (PCI) or in the words of Foley et al., a deadly combination. GI bleeding is relatively common after PCI (2.3% after primary angioplasty in one study, which also reported a 10% mortality following this complication). The therapeutic dilemma arises from the fact that sudden cessation of anti-platelet therapy following PCI may result in acute stent thrombosis. So, how should the risk of bleeding post-PCI be managed? Following their review of the literature, the authors conclude that those patients considered to be at particular risk of GI bleed should be managed on an individualized basis with expert input from both gastroenterology and cardiology. A considered therapeutic balance is advocated with anti-platelet therapy and proton pump inhibitors (PPIs). A protocol based upon current evidence is presented. However, the authors acknowledge that further work is needed in this area.

Patients who present to the accident and emergency department with sudden severe headache represent a diagnostic challenge. The majority will be shown to have such conditions as migraine or cluster headache and will not require extensive investigation or intervention. A key objective for the emergency physician is to identify the patient who may have had a subarachnoid haemorrhage (SAH). There is some degree of consensus with respect to the initial diagnosis and management of patients who present with sudden and severe headache. For example SAH should be suspected where there is sudden severe headache peaking within minutes and lasting for over an hour. Furthermore, key historical details should be sought and documented in the case notes to include timing of onset of headache and associated symptoms. A retrospective audit of over 12,000 patients who presented to the accident and emergency department over 3 months revealed that 91 adults complained of sudden severe headache. Documentation of symptoms was satisfactory in just a third of cases and 12 patients could have been given a clear diagnosis if the International Headache Society classification had been applied to the documented history. Neurological advice was sought in a minority of cases. The use of used simple protocols that highlight relevant aspects of history and examination, principles for further investigation and criteria for consultation with neurologists is recommended. A suggested algorithm is provided.

Another study evaluates clinical practise and finds it to be wanting in several aspects. An association between *Clostridium difficile* associated disease and the use of PPIs has already been suggested. In a prospective study over a 4 month period in Manchester, Ziglam and colleagues that 88 of 138 patients who developed *C. difficile* infections were on PPIs. Using NICE guidelines as a standard, a valid indication for therapy could not be found in 63% of the patients on PPIs. The authors conclude that their findings represent another failure of passive dissemination of written guidelines.

Changing disease patterns, increased workload for general physicians and rising admissions have been documented in many countries. One response to this combination of challenges has been the development of the acute medical admission unit (also known as the medical assessment unit) particularly in the UK. The immediate benefits of such a unit seem self-evident: the concentration of acutely ill patients in one place with access to appropriate monitoring, investigation and continued input from an on-call physician with no other duties. Some have reported an improvement in the diagnostic process with a reduction in both inappropriate admissions and investigations. A study from Dublin boldly claims a further benefit namely a reduction in all-cause hospital mortality, which decreased from 12.6% in 2002 to 7.0% in 2006. They concede that their prospective study was by
nature purely observational and uncontrolled with possible unknown sources of bias. Hence a degree of caution is needed with respect to the findings. However, the establishment of the acute medical admission unit is growing and *QJM* would welcome further research and reviews in this area.

A somewhat controversial paper from Canada considers Vitamin B12 deficiency in pregnant women. Maternal folate deficiency is considered by many to represent a risk factor for the development of neural tube defects (NTD). However, some authorities (including the authors of this retrospective cross-sectional study of Ontarian women aged 15–46 years) believe that vitamin B12 deficiency may be an independent, additional risk factor for NTD. About 1 in 20 pregnant women may be deficient in B12 in early pregnancy. The impact on maternal and foetal well-being, including preventable neural tube defects, should be considered.

Two papers deal with Type 2 diabetes mellitus (T2DM). Singhania and colleagues in India explore the roles of oxidative stress and endothelial dysfunction in Asian Indians with T2DM. They propose that both factors as indicated by reduced activity of nitric oxide pathway and enhanced expression of vascular cell adhesion molecule-1 sVCAM-1 play an important intermediary role in the pathogenesis of macrovascular complications in T2DM. The second paper on this broad subject area by Song and Hardisty raises doubts about the usefulness of using metabolic syndrome as a clinical tool for the management of patients with T2DM.

We publish another paper by Eddleston on management of organophosphorus pesticide self-poisoning. This represents a significant healthcare challenge especially in South Asia. It is associated with both high mortality and morbidity. It is important, therefore, to be able to predict those patients who will require intensive observation and therapeutic intervention especially when resources are limited. This study evaluates the usefulness of a low butyrylcholinesterase (BuChE) activity on admission as a predictor of poisoning severity. The conclusion is that while high levels of BuChE on admission is associated with poor outcome, this was only the case when the specific poisoning agent was known.

Finally, there are two papers in this month’s issue with a hepatology theme. A retrospective review of 191 patients with hepatocellular carcinoma in India found that most cases presented at an advanced stage of disease that was not amenable to treatment. A case for universal Hepatitis B vaccination is made. Masson *et al.* describe a decade of experience of using transjugular intrahepatic portosystemic shunt (TIPS) for portal hypertension. The study particularly focused on the development of post-TIPS hepatic encephalopathy (HE). The findings were encouraging in that while HE was relatively common after TIPS insertion, it is relatively shortlived and easily managed.

Michael Bannon