Elements: In this month’s issue

The presenting symptoms of congestive cardiac failure (CCF) are well recognised and include peripheral oedema, tachypnoea and tachycardia. While CCF is usually associated with low cardiac output, the review article by Mehta and Dubrey considers a less commonly encountered clinical syndrome where symptoms suggestive of CCF are found with high cardiac output i.e. high output cardiac failure (HOCF). The aetiological basis for HOCF is broad and includes chronic severe anaemia, sepsis, Paget’s bone disease, arteriovenous shunts and hyperthyroidism. The underlying pathophysiology is complex and involves a reduction in systemic vascular resistance, with subsequent activation of neurohormones resulting in retention of both salt and water. It follows that conventional therapeutic regimes for CCF are unlikely to be effective in HOCF and could even result in rapid clinical deterioration. There is a dearth of clinical trial data in this area. Currently available evidence indicates that in addition to correction of the underlying anomaly, the symptoms of HOCF may be treated to some extent by means of salt and water restriction along with cautious use of diuretics.

The first of the original papers in this month’s QJM is from a team in Glasgow who prospectively observed the incidence, predisposing factors and outcome of urinary tract infection (UTI) in over 400 patients admitted with a stroke. UTI is known to be a relatively common complication following stroke (with falls and pressure sores being more common). The incidence of UTI in the patients studied was of the order of 16%. UTI was associated with severe post stroke disability, increased age and the use of urinary catheters. It was noted that the presence of UTI in stroke patients might also be linked to increased morbidity and mortality. The clear messages from this study are for clinicians to maintain a high index of suspicion for the possibility of UTI in patients who have been admitted following a stroke and to instigate prompt treatment where appropriate. The authors make a plea for restraint with respect to the use of urinary catheters in this patient group and for clinical teams to consider other methods of continence management.

Two papers in this month’s issue consider the complications of diabetes. The first is an epidemiological study that explores the complex relationships between ethnicity, diabetes mellitus (DM) and chronic kidney disease (CKD). The authors make the point that the effect of ethnicity on the prevalence of diabetes mellitus (DM) and associated chronic kidney disease is at present poorly understood. A cross sectional study of over 30,000 diabetics in East London found a predictable variation in the prevalence of DM by ethnic grouping. Asians had the highest prevalence rate for DM (11%); however the overall picture became considerably more complicated when CKD was also considered. While the overall prevalence of CKD (stages 3-5) among diabetics was 18%, this varied considerably by ethnic group and further variation was evident when severity of CKD was taken into account. Milder forms of CKD were found in Whites with more severe renal disease being present in Asians and Blacks. The authors conclude that the significant differences that exist in disease prevalence between ethnic groups should be addressed in order to reduce inequalities in terms of health care outcomes.

The second paper on the general theme of diabetes is a helpful review by Younis on the effectiveness of tight glycaemic control in the reduction of cardiovascular disease in patients with type 2 diabetes mellitus (T2DM). The benefit of tight glycaemic control in this patient group in terms of reduced rates of retinopathy and nephropathy is accepted; however the relationship between incidence of cardiovascular disease in T2DM patients and glycaemic control is not absolutely clear. Younis considers four major trials and concludes that tight control may be more
appropriate for young T2DM patients who have been recently diagnosed and who are not known to have either cardiovascular disease or risk factors.

Finally, the original paper by Cappuccio et al. has generated more interest in terms of rapid email responses than any other published in QJM during the past two years; several of these are published in the printed edition of this month’s QJM. Others will be available from the journal’s website. (The authors will produce a collated response for next month’s issue.) So why has this paper received so much attention? The paper considers the European Working Directive 2009: an issue that has caused both controversy and sharp division of opinion. From 1st August 2009 all doctors in training within the EU will be required to work to a 48 hour working week (averaged over a period of time) with rest periods. EWTD has been a source of concern from all concerned: doctors on training, their consultant supervisors and health service managers. The concerns might be summarised as follows: Is compliance with EWTD 2009 possible? How can rotas be filled in order to ensure EWTD compliance and service delivery? Will it be possible to train doctors to high standards in a shorter working week? How can safe and effective services be delivered to patients after August 2009? (On the subject of EWTD and training I refer you to the following weblink http://www.healthcareworkforce.nhs.uk/index.php?option=com_d4j_ezine&Itemid=1521 which summarises the conclusions from a DH funded project on the subject.) The paper by Cappuccio considers another aspect: the issue of patient safety and EWTD 2009. It must be remembered that EWTD was implemented to include doctors in training for several reasons: employee welfare (in this case junior doctors) and patient safety. The paper by Cappuccio et al. implies that a rota which is EWTD 2009 compliant results in reduced rates of medical error when compared to a 56 hour per week rota. At the end of the day this finding should be welcomed. However, it is likely that EWTD is likely to stimulate further debate and controversy. We would welcome your opinion on this. In addition, considering the implications of EWTD, relatively little research has been undertaken so far to seriously consider its implications. Much of what has been published is based upon opinion. Hence QJM would be interested in seeing more hard research around the subject of EWTD.

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