Elements: In this month’s issue

The amount of literature on the subject of oxidative stress (OS) is truly vast—over 65,000 items are available under this heading in PubMed (of which 11,000 are review papers). This is hardly surprising given the role that OS plays in the pathophysiology of a variety of important disease processes that include heart failure, myocardial infarction, and Parkinson’s. The high profile of OS in the medical literature is mirrored in the popular press and other media. The term “oxidative stress” when entered into Google will yield a return of over 4 million hits! Many websites are keen to draw the attention of the health conscious public to the hazards of free radicals and emphasise the importance of keeping a step ahead of oxidative stress. The arguments are persuasive: OS is clearly implicated in a variety of life threatening and limiting diseases. The solution would appear to be relatively straightforward: determine your personal level of oxidative stress and repair the damage by appropriate dietary manipulation (mainly in the form of vitamin supplementation) and lifestyle change. So, given the current high profile of OS, why should QJM add to this volume of literature by publishing yet another authoritative review on the subject? Thompson and colleagues consider the use of antioxidants in the treatment of heart failure. They consider the available evidence and re-affirm the links between OS and heart disease. Current evidence now strongly suggests that administration of antioxidant vitamins alone is unlikely to yield sufficient benefit and furthermore, the use of Vitamin E as a monotherapy may even be harmful. On the other hand a diet that is rich in a range of antioxidants and potential co-factors is much more likely to provide protection against heart disease. Hence the true situation is much more complex than that portrayed on many websites.

One of the research papers in this month’s QJM has already attracted media attention following its online publication. It deals with a topic that could be contentious and result in conflict between oncology patients and their physicians. The use of complementary and alternative medicine (CAM) by patients could potentially represent a cause for concern on a number of accounts: adverse reactions of CAM with standard therapies; patients may not adhere to their treatment regimes and perhaps worst of all, they may be disappointed when alternative therapies fail to deliver a cure. Waxman and colleagues from Imperial College undertook a questionnaire survey of oncology patients’ use of and views regarding CAM. Doctors should be reassured by the findings from this observational survey. Patients, on the whole, did not resort to CAM because of dissatisfaction with the standard treatments they received. Furthermore, the main reason for use of CAM by oncology patients was understandably to “feel better”. Reassuringly, they did not believe that alternative therapies would result in significant overall benefit in terms of cure or remission. Perhaps the most significant finding was that patients thought that doctors were unaware of CAM use. Does this represent an unmet training need for oncology physicians? Have any studies been conducted to assess doctors’ views in this area? If so we would like to hear of them.

Finally, there is a discussion by Boriani and colleagues on the cost effectiveness of implantable cardioverter defibrillators (ICD). The argument is a familiar one: a device is available that could effectively deal with a life threatening health condition but the treatment comes at a relatively high price. So can we afford the more widespread use of ICDs and if not, how should we select the patients who should be treated with this technology driven intervention? The authors point out that sudden cardiac death continues to represent a significant cause of mortality in developed countries. There is now an emerging body of evidence regarding the effectiveness of ICDs with respect survival in the medium term. ICDs were first devised about 25 years ago for the purpose of preventing sudden cardiac death in certain...
patients with ventricular tachyarrhythmias. Since then consensus guidelines for ICD implantation have been developed. It is claimed that the number needed to treat, in order to save one life, ranges from 3 to 18. However, the decision to adapt costly new treatments is (the authors claim) largely based upon financial issues alone. The paper considers a number of more comprehensive analytical tools (that include cost-effectiveness, cost-utility and cost-benefit) which collectively should be used to inform decisions on health care expenditure. One wonders whether the use of these tools will be more prevalent (or not) in view of the current financial crisis.

Michael Bannon
Editor, QJM