Interstitial pulmonary fibrosis (IPF): an opportunity to revisit an old disease

Editor's choice

Sethi and Mahendran consider another topic in the series on organ fibrosis; this month the subject is that of idiopathic pulmonary fibrosis (IPF). It is interesting to compare and contrast the varying pathophysiology implications for patients and treatment opportunities for fibrosis of differing organs. A few aspects of IPF are worthy of note: firstly, it has particular relevance for QJM in that interstitial pulmonary pneumonia was described by the journal’s first editor, Sir William Osler, at the end of the 19th century (for those readers who are interested in the history of medicine I refer you to the online archive which allows access to all back issues of QJM). Secondly, it is relatively common in terms of incidence (4 to 5/100,000 population in the UK and a prevalence described as varying between 14 to 40/100,000 population in the US.) Sadly, prognosis for this disease is relatively poor and may be even worse than many cancers in terms of 5-year survival. In the views of the authors of this review, it is of concern the subject of IPF has received relatively little attention when compared with other disease processes. Until relatively recently therapeutic options were mainly limited to palliative care. There is, however, some cause for optimism. Recent research in animal models has resulted in a useful reclassification of IPF. A further consequence of this has been an encouraging increase in the number of clinical trials which have explored different therapeutic options. Promising developments include the use of new drugs such as pirfenidone, targeted anti-TGF agents as well as innovative strategies to block galectin-3.

Treatment options for patients with non-ST elevation acute coronary syndrome (NSTE-ACS)

The second review in this month’s issue is from Paris and focuses on current antiplatelet treatment options for patients with NSTE-ACS. In recognition of the fact that activation of platelets is fundamental to the development of this disorder, universally accepted practice recommends the use of antiplatelet drugs along with aspirin in order to enhance the development of revascularisation. The overall purpose of this review was to critically evaluate current antiplatelet medication. Clopidogrel was one of the first drugs in this clinical scenario; subsequent experience following its introduction however demonstrated a limited effectiveness in terms of variation in therapeutic response. Ticagrelor and prasugrel are now considered to be much more reliable and effective; furthermore, they would appear to have an acceptable safety profile and are relatively well tolerated by patients. This review is useful in a number of respects. In the first instance, a critical comparison of the particular characteristics of these two latter drugs is described in detail drawing evidence from several large trials; this could help physicians with respect to ensuring the most optimal treatment choice for individual patients. Secondly, a number of areas of future research are identified. In the opinion of the authors, there is an urgent need for what is described as ‘head-to-head’ studies comparing the risks and benefits of ticagrelor and prasugrel in NSTE-ACS. In addition, in recognition of the fact that many NSTE-ACS patients are likely to be older and to have co-existing morbidities such as diabetes, further research is required in order to define the safest and appropriate therapeutic regime for this class of patients.
Adverse cardiovascular outcome in early onset patients with type II diabetes (T2DM)

Soon and Gray from Sheffield explore the cardiovascular implications of atherogenic apolipoprotein particles for patients with early onset (i.e. less than 40 years old) T2DM patients. It is already known that this group of diabetic patients are at particular risk for subsequent adverse cardiovascular outcomes. For this reason, NICE has recommended the use of statins with the aim of lowering LDL cholesterol for this patient group. The authors argue however that atherogenic apolipoprotein particles are much better predictors of future adverse cardiovascular events than LDL cholesterol during the course of statin therapy in this patient group. Accordingly, they assessed the burden of atherogenic apolipoprotein particles in early-onset type 2 diabetes and compared it with those who had later-onset disease (both groups were on treatment with statins). It was found that levels of atherogenic apolipoprotein particles were higher in younger T2DM patients despite apparently adequate treatment with statins. The authors acknowledge the limitations of their study, particularly the small sample size. They conclude, however, that it may be the case that early-onset T2D is associated with a phenotype that requires more aggressive lipid-lowering strategies than those currently recommended.

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