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Acute and general medicine for the physician

Max Yates and David Scott

Introduction

Acute medicine is an important part of a general physician's role. Clinicians are increasingly expected to recognise, understand and treat patients in the relentless advance of modern medicine. This makes medicine challenging and a commitment to keep up to date is vital. This conference therefore was broad and wide-ranging in its content, with some of the presentations concentrating on aspects of research while others dealt with more clinical practice issues. The core themes of obesity and social behavioural change, with respect to alcohol and how these will have a major impact not only on disease burden but also on the economy, recurred during the conference.

The October 2009 conference focused on medicine, its organisation and the pathway of patients from admission to discharge. Community-based medicine, in terms of intermediate care, was also represented. It was well attended and the talks were given by 46 clinicians working in different parts of the UK, which provided a diverse and dynamic element especially within the post-presentation discussions.

Organisational factors

Talks during the day focused on patient flow. With increased expectations, as the population ages and with greater provision of medical treatments there has been a greater burden on medical care, which has led to increasing pressure on hospital beds. Patient flow is therefore paramount to the successful running of a hospital.

At the 'front door' there is the four-hour wait in accident and emergency (A&E) and, partially as a result, medical admission units have developed. The National Confidential Enquiry into Patient Outcome and Death (NCEPOD) now recommends that the emergency admission unit as an integral part of the patient journey. In some trusts this led to investigations being carried out on all patients as they entered the hospital but this poses an interesting diagnostic challenge especially in those tests with a low specificity, for example D-dimer. It is widely known that a negative D-dimer is inconsistent with venous thromboembolism. However, for the negative predicative value to reach 99% in those patients that walk through the door, the sensitivity also has to be very high. Blanket testing on all patients who attend A&E is therefore likely not only to be confusing but also to be a false economy under the guise of saving time.

The acute hospital model is, of course, only one model of care and other models were discussed. These included community hospitals and outreach community work by traditionally acute hospital-based physicians. It was reported that in Holland and Canada there is no upward trend in emergency admissions to acute hospitals and this is thought to be in part due to a good community healthcare arrangement. In some areas of the UK, community hospitals are providing increasingly technical care and looking after more unstable patients that might otherwise have stayed in the acute trust. In other areas consultants are making home visits to prevent admissions to hospital. The Institution for Innovation and Improvement has recommended that admissions for certain conditions should be avoided. The aims of community or intermediate care are threefold:

1 reduce the length of an acute hospital stay
2 prevent inappropriate admissions
3 prevent institutionalisation.

It is likely, therefore, that other models of healthcare will proliferate to reduce admissions to acute hospitals. Although these models may not reduce costs, they will focus on reducing patient bed days within acute hospitals.

The obesity epidemic

Calories per day per person have increased by 15% since 1970. The main themes of the 2009 Lord Rayner lecture, delivered by Sir Nicholas Wald, were the polypill and the obesity epidemic. It was suggested that it is better to treat and prevent than to test and measure. The implementation of an SASS tax (salt, alcohol, sugar and saturated fat), which would apply to foods, was also proposed – a defined cut-off point would be imposed after which a levy would apply and so those foods that are high in the SASS constituents would attract a bigger tax. The problem of food shortage has turned into the problem of excess and therefore drastic action, such as the SASS tax, is required to change society's consumption of energy dense foods.

The obesity epidemic will not only have an impact on heart disease and stroke rates as it is estimated that by 2050 obesity-related conditions will cost £19.7bn or 14% of healthcare expenditure. Obesity-related liver disease was also discussed (non-alcoholic fatty liver disease and non-alcoholic steohepatitis (NASH)). In a Swedish study 20% of patients with NASH went on to develop cirrhosis. The obesity epidemic will therefore lead to increased rates of cirrhosis and hepatocellular carcinoma. It was advised

Max Yates, core medical training year 2; **David Scott,** consultant rheumatologist,

Norfolk and Norwich University Hospital, Norwich

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that those patients with consistently elevated alanine transaminase, obesity and age over 40 should have an abdominal ultrasound and referral for consideration of liver biopsy.

Genetics

Genetics is a rapidly developing field. Currently most of work is within the realm of research, however, there are clinical applications under development. Several gene loci are implicated in different chronic inflammatory diseases, for example, there have been advances in the pathogenesis of psoriasis TH17 and the product IL-17A are pivotal. There is also significant overlap with many chronic conditions having shared loci. It may well be that in the future genetics tests will inform clinicians of how likely certain individuals are to survive serious illness and therefore which patients are most appropriate to be admitted to an intensive care unit. For example, those patients with the D allele of the ACE gene have an increased risk of developing acute respiratory distress syndrome.

New therapies

Several talks involved updates on those medical conditions most commonly encountered by general physicians, for example updates on chronic respiratory disease, diabetes, heart failure and sepsis. There was a common theme of monoclonal antibodies. There has been an explosion in the number of these therapies and further developments in the range of medical conditions that these therapies will have a utility will no doubt increase. Often the names of monoclonal antibodies can be confusing: however there is a nomenclature: ximab (chimeric mouse-human), zumab (humanised mouse <10%), umab (human) and cept (receptor-antibody fusion protein).

The physician as interventionalist was also key and the treatments and procedures offered by physicians is another developmental area. One area was that of cardiac valve replacement carried out using a cardiac catheter either a transfemoral, or in some cases a transapical, approach.

Conclusions

The 2009 conference was very broad – the main areas covered were patient pathways, updates on medical conditions, the interaction between primary and secondary care and finally discharge policies. Suggestions for increasing the scope of the conference next year could possibly include maternal medicine. Often physicians are concerned when asked to review pregnant women as it is perceived that the treatment will be complicated.

The conference was dynamic and prompted interesting discussions covering a diverse range of topics in acute medicine.

Conference programme

26 October 2009

Care pathways for the general physician
Chair: Professor Derek Bell, Chelsea & Westminster Hospital, London

Alternative pathways for admission
Chair: Dr Mike Cheshire, Royal College of Physicians (RCP)

Care pathways for the critically ill

LORD RAYNER MEMORIAL LECTURE
The Polypill - From Concept to Reality
Professor Sir Nicholas Wald FRS, Wolfson Institute of Preventative Medicine, London

27 October 2009

Primary/secondary care interface: disease-specific pathways involving the community
Chair: Professor David Scott, Norfolk and Norwich University Hospital

Secondary care speciality updates: musculoskeletal/dermatology issues
Chair: Dr Chris Lovell, Royal United Hospital, Bath

Current political issues and the general physician
Chair: Professor David Scott

Secondary care speciality updates: renal and endocrine
Chairs: Professor Peter Mathieson, University of Bristol and Dr Mark Vanderpump, Royal Free Hospital, London

28 October 2009

Secondary care speciality updates: GI disease, respiratory disease, cardiology andneurology
Chair: Dr Stuart Bloom, University College London Hospitals

The back door: Exit strategies political issues in health care
Chair: Dr Mike Cheshire

Address for correspondence: Dr M Yates, Norfolk and Norwich Hospital, Colney Lane, Norwich NR4 7UY.
Email: maxyates@doctors.org.uk