J R Coll Physicians Edinb 2015

Haematology symposium

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The Haematology symposium was held on 25 September 2015 at the Royal College of Physicians of Edinburgh

DECLARATION OF INTERESTS AL was a member of the organising committee for this symposium.

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INTRODUCTION

Much progress has been made in the field of haematology in recent years, with improved understanding of disease pathogenesis and the emergence of novel therapies transforming the management of many malignant and non-malignant blood disorders. The purpose of this symposium was to discuss how patients with haematological issues interact with both primary and secondary care, and to examine the impact of recent advances in diagnosis and treatment.

SESSION 1: MALIGNANT HAEMATOLOGY

Professor Graham Jackson (Newcastle University) opened the symposium with an overview of the diverse clinical manifestations of a paraprotein. The association between increasing age and monoclonal gammopathy of uncertain significance was emphasised, with an incidence of approximately 2% in those over 70 years of age. While the majority never progress to overt myeloma, it is vital to identify end-organ damage promptly, particularly renal failure and spinal cord compression. Newer agents such as bortezomib and lenalidomide have transformed the therapeutic landscape of myeloma and are often well tolerated in older, less fit patients. The superiority of intravenous zolendronic acid over other bisphosphonates in the prevention of bone destruction was also highlighted.[1]

The importance of rapid intervention in neutropenic sepsis was discussed by Dr David Meiklejohn (Ninewells Hospital, Dundee), with evidence showing that mortality rises by 7.6% for every hour that antimicrobials are delayed in septic shock.[2] The incidence of neutropenic sepsis is increasing, possibly due to increased use of more intensive chemotherapy regimens. Prophylactic antibiotic therapy and growth factor support can be used as primary or secondary prophylaxis. The emergence of resistant organisms is an increasing problem and demands ongoing local review of appropriate empiric antibiotic therapy.

The session was completed by Dr Dominic Culligan (Aberdeen Royal Infirmary) who demonstrated the clinical heterogeneity that lymphoma can exhibit through several entertaining cases. Although imaging and laboratory tests can be helpful, he made a persuasive case for the ultimate importance of targeted biopsy in unraveling more cryptic presentations.

SESSION 2: HAEMOSTASIS AND THROMBOSIS

The decision to recommend long-term anticoagulation to a patient after an episode of venous thrombosis carries huge implications. Dr Trevor Baglin (Addenbrooke's Hospital, Cambridge) re-iterated the importance of careful assessment of provoking factors, rather than routine thrombophilia testing, in determining management. Current consensus suggests ongoing anticoagulation is indicated when the risk of recurrent thrombosis is greater than 5% per year. This exceeds the 'clinical equipoise' from major bleeding due to anticoagulation. Younger age, male sex, absence of oestrogen exposure and elevated d-dimer levels (off anticoagulation) all predict increased recurrence risk and are incorporated into scoring systems such as DASH.[3]

The management of venous thrombosis at sites other than lower limb or pulmonary embolism is hampered by a relative lack of high quality studies. Dr Campbell Tait (Glasgow Royal Infirmary) presented an interesting overview of the various types of unusual thrombosis. Well-established risk factors for venous thrombosis, such as pregnancy and malignancy are often implicated. Specific associations should also be considered, such as the high frequency of JAK2-positive myeloproliferative disease in abdominal vein thrombosis.

Direct oral anticoagulants are effective in the treatment and prevention of thromboembolic disease. Professor Mike Makris (University of Sheffield) provided a guide to their management in the emergency setting. In the absence of an effective antidote, he underlined the importance of basic haemostatic measures. Evidence to support prothrombin complex concentrate is limited to animal models and in vitro data, but remains an option in the event of life-threatening haemorrhage. Target-specific antidotes are in development and hold future promise for direct oral anticoagulant reversal.

SESSION 3: GENERAL HAEMATOLOGY

Senior trainees from each of the Scottish deaneries presented clinical vignettes. These included a case of thrombotic thrombocytopenic purpura successfully treated with bortezomib, and angioimmunoblastic T-cell lymphoma presenting with spontaneous splenic rupture. These were well received and provoked lively discussion.

Dr Beverley Robertson (Aberdeen Royal Infirmary) then described the wide-ranging clinical manifestations of sickle cell disease. She highlighted the reduction in morbidity and mortality that has been seen over the past few decades, due to better appreciation of complications and earlier intervention. The benefit of chronic transfusion programmes and role of hydroxycarbamide in reducing the frequency of sickle crises were emphasised.[4]

Professor Mary Frances McMullin (Queens University, Belfast) discussed the diagnosis of the myeloproliferative neoplasms, illustrating her own considerable expertise in the field. Myeloproliferative neoplasms are phenotypically diverse and diagnosis can often be difficult. The JAK2 V617F somatic mutation results in constitutive activation of tyrosine kinase-dependent cell signalling pathways and is found in the majority of patients with polycythaemia vera, and approximately half of essential thrombocythaemia. This has not only enhanced our understanding of myeloproliferative neoplasms, but also opened up new therapeutic avenues and simplified the distinction between primary and secondary disease.

REFLECTION

This symposium explored common scenarios where haematology interfaces with the medical community. It is evident that numerous exciting developments have occurred, blazing a trail for other specialties, with many advances finding application in the wider patient population. The increasing usage of newer agents, such as direct oral anticoagulants, or biologic therapies for other immune-mediated conditions, highlights the importance of ongoing interdisciplinary collaboration and communication.

REFERENCES

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