*" ...where is the balance between the risk of haemorrhage following invasive procedures and causing life threatening thromboembolic events?"*

# Managing patients on warfarin

Much of what we do everyday is about balance. We have to balance bad against good, harm against benefit and injury against resolution. Plus we have to seek informed consent as well. It's a tough number.

To help us we have research and we have guidance, sometimes less explicit than we would like but at other times fairly detailed and direct. This issue of the journal contains, I believe, an example of the latter in the form of guidelines for the management of patients on oral anticoagulants requiring dental surgery, which should in the course of our work be of value to us all at regular intervals.

Patients on warfarin are increasingly seen in a primary dental care setting as well as within secondary care for minor oral surgical procedures such as extractions. The advice from various sources on how to manage these patients has left many unsure about appropriate, safe clinical practice. The British Committee for Standards in Haematology (BCSH) Task Force on Haemostasis and Thrombosis (a sub-committee of the British Society for Haematology) together with the British Dental Association and the National Patient Safety Agency (NPSA) has developed the evidence-based guidelines published here (pages 389-393). The hope is that these will allay dental practitioners' anxieties on how to treat such patients and allow a uniform approach to their management.

To put the problem into perspective, currently in the UK approximately 0.5-1.0% of the population take warfarin, the major indication for which being atrial fibrillation. The prevalence of atrial fibrillation in the UK is in the order of 0.5% at age 50-59 and doubles every decade thereafter. With an increasingly elderly population and with a number of studies indicating that we are not identifying all patients with atrial fibrillation who would benefit from anticoagulation, we can predict that the number of patients prescribed warfarin in the UK is likely to increase rather than decrease. This is certainly the view of most haematologists in the UK where the numbers of patients attending out-patient anticoagulant clinics has consistently increased.

So, why are we prescribing warfarin in atrial fibrillation? There is no doubt that adjusted dose warfarin in patients with atrial fibrillation significantly reduces the risk of cardio-embolic stroke compared to low dose warfarin, aspirin or placebo (NICE).

The management of this group of patients who frequently require dental surgery has been contentious with various agencies publishing conflicting guidance. To address these issues the BCSH Task Force has produced these guidelines which should be universally adopted by all those managing dental patients on oral anticoagulants.

In essence, for the majority of patients stably anticoagulated on warfarin with an international normalised ratio (INR) of <4, undergoing routine dental surgery including dental extractions there is no necessity to alter the dose of warfarin. The INR should ideally be measured within 72 hours prior to the operative procedure which will allow time for any dose adjustment so that the INR is less than 4.0 on the day of the procedure.

The emergence of the guidelines has come about precisely because of the need to identify where the balance lies between the risk of haemorrhage following invasive procedures in the mouth (or indeed elsewhere) and of causing life threatening thromboembolic events by ceasing the anticoagulant for a time to cover the period of the planned treatment. Much myth and speculation has existed hitherto in relation to the subject and for many years anticoagulants were stopped in these circumstances in the belief that this was in the patient's best interests. With hindsight and with evidence it now seems that this is not the case and that careful patient management including co-operation with our medical colleagues, especially the patient's haematological advisers, together with the implementation of local measures aimed at effective haemostasis at the site of the wound will provide adequate safeguards.

But, as with all dental care we are dealing with biology and the caveat remains that every patient is an individual and so requires a bespoke treatment plan however compelling the evidence is for the situation in the majority of cases. This is where our clinical judgement also comes into play in assessing the evidence, the pros and cons, the advice from colleagues and our own experience of such patients and the extent of the proposed procedures.

Paramount in this process is the routine taking and updating of patients' medical histories. As noted above, the number of people being placed on oral anticoagulants is increasing all the time, especially with an ageing population. Added to this is the fact that as older people are now keeping more of their teeth for longer it inevitably means that a greater number of invasive procedures will also be required compared with, say 40 years ago when about one third of the UK adult population was edentulous. These developments also have consequences for the prescription of other medications, such as anti-inflammatory agents which may have adverse interactions with and consequences on the oral anticoagulant therapy; as also detailed in the guidance. Such clarity of advice is uncommon in an age of defensive prevarication and we should welcome this guidance to help us in juggling our daily quest for good, benefit and resolution.

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