Is it obligatory to interfere warfarin therapy during dental procedure?

Nowadays an ample number of patients who are being treated with oral anticoagulants to prevent venous or arterial thrombosis are evident to dentists. Warfarin, a Vitamin K antagonist, is one of the coumarin groups of drugs and is prescribed for various conditions such as atrial fibrillation, pulmonary embolism, myocardial infarction, stroke, deep venous thrombosis, and antiphospholipid syndrome or patients with prosthetic heart valves. Warfarin works through the inhibition of the vitamin K-dependent coagulation factors: factors II, VII, IX, X, protein C, and protein S.[1] The activity of warfarin is expressed as the international normalized ratio (INR), which is the standard introduced by the World Health Organization 20 years ago. The prothrombin time or INR must be checked regularly to ensure therapeutic anticoagulation status.[2] Warfarin therapy reduces the risk of arterial thromboembolic events such as stroke by 70%[3] and the risk of recurrent venous thromboembolism by 90%.[4]

One study recently reported that 9% of general dental practitioners in the study did not treat patients on warfarin for "a variety of reasons."[5] According to the review of literature, patients requiring dental surgical procedures and having an INR below 4.0 should continue warfarin therapy without dose adjustment. Still, this issue remains controversial allover. Surgical procedures in patients with anticoagulant therapy may lead to bleeding, which is a great concern to a medical practitioner. Interruption of the warfarin therapy before any surgical procedure does not carry any significant role however it may linked with complications.

Various dental techniques do not comprise a substantial threat of bleeding. As they hardly consist of major vessels and bleeding sites can be simply retrieved to treat by local pressure postoperatively. Thus, no distinct actions are mandatory while treating patients' on anticoagulant therapy. Most Western countries do not recommend reducing or interrupting warfarin therapy or replacing it with heparin before dental extraction.[6]

Events in a dental office which may bring a risk of significant bleeding in patients with anticoagulant therapy are inferior nerve blocks, subgingival scaling and root planning, periodontal therapy, implants, biopsies, extractions, incision, and drainage of swellings and few oral surgery procedures. The vast majority of patients on Warfarin will have an INR of 2.0–3.0 and should be able to undergo routine dental extractions/minor oral surgery without stopping their warfarin. Stopping warfarin is no assurance that the risk of postoperative bleeding requiring intervention will be eliminated, as serious bleeding can occur in nonanticoagulated patients too. Past practice (to discontinue treatment with anticoagulants before the operation) increases the risk of a rebound thromboembolus.[7] The Dental Practitioners' Formulary 2002–2004 stated that "patients requiring minor dental surgery and who have an INR below 3.0 may continue warfarin without dose adjustment."[8]

Dentists and physicians should work together carefully when treating patients on warfarin to make sure that their INR levels are within the therapeutic range before dental surgery. Simple, straightforward extractions could be performed on the same day, which can save time and resources in hospital care. It can be concluded that in patients with simple dental procedures, ongoing dose of warfarin will not cause any significant risk of bleeding, therefore, it is not essential to terminate it.

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