

66. High-dose warfarin requirements

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Q: "My dentist refused to clean my teeth because I have factor V Leiden. Do you have anything published I can take to the dentist to show that it is o.k. to work on my teeth?"

A: Factor V Leiden is a very common variant of clotting factor V, present in ca. 5 % of the Caucasian population. While it slightly increases the risk for venous thromboembolism (4-7 fold for the heterozygous individual compared to people who do not have factor V Leiden), most individuals with FVLeiden never have any medical problems in their lifetime related to factor V Leiden. No special precautions need to be taken when doing dental work (teeth cleaning, extractions, root canals, etc.), unless patients are, for some reason, on blood thinners.

The average coumadin (=warfarin) dose patients need to get their INR into the therapeutic range (typically INR 2.0-3.0) is 5 mg per day [Blood 2000;96:1816-9]. An individual's dose may be higher or lower, depending on the person's metabolism, dietary vitamin K intake, and level of targeted INR range. Many patients need doses higher than 5 mg per day, and 12 mg is not at all an unusual dose. Once doses reach 20 mg a day, I would talk about "high doses". However, the absolute dose does not matter. Side effects are not higher if the Coumadin (=warfarin) dose is higher - it is the INR value that is important and that predicts side-effects, i.e. bleeding. If the INR is too low, patients and physicians just need to increase the coumadin (warfarin) dose to however much it takes to get the INR into the target range. They should not be afraid because the "dose is so high". High coumadin (warfarin) requirements just indicate that the individual has a very active metabolism that gets rid of coumadin (warfarin) very rapidly. Occasionally patient's need up to 40 or 50 mg per day [Drug Intelligence and Clinical Pharmacy 1983;17:281-3]. The maximal dose I have seen reported in the literature is 145 mg per day [N Engl J Med 1964;271:809-15].

Physicians may also talk about "warfarin resistance" when patients require high warfarin doses, such as doses above 20 or 30 mg per day. This is discussed further in [Q/A 28](#).

References:

1. Blood 2000;96:1816-9
2. Drug Intelligence and Clinical Pharmacy 1983;17:281-3
3. N Engl J Med 1964;271:809-15