2 July 2008

Dear Colleagues,

Many of your patients with arthritis of the hip and knee have undergone Joint Replacement over the past two years and there has been confusion regarding the use of Warfarin during the postoperative period. Although several of my colleagues in Orthopaedics have been using Clexane, there was a series of patients two years ago that had wound hematomas and infections due to persistent drainage. Because of the well documented increase in wound complications with the use of low molecular weight heparins, Paul Pflueger and I started using a protocol developed by Richard Rothman, MD, PhD at Jefferson Medical College Department of Orthopaedic Surgery. Their results indicated no difference in the prevention of thromboembolic and bleeding events when compared to a standard variable-dose warfarin protocol.

The protocol is published in The Journal of Arthroplasty Vol. 16, No. 8, 2001: pp. 1030-1037, and runs as follows:
Inpatient - Warfarin 2 mg orally in the evenings starting the night of surgery.
Daily monitoring of the INR, with decrease to Warfarin 1mg if the INR begins to rise (>1.3).
Outpatient – Warfarin continued until six weeks postoperative with continued INR monitoring to watch for a delayed rise. If the INR goes above 1.3 warfarin is discontinued and the patient should be continued only on their low dose Aspirin (see below).

When our patients are sent home on the 1mg dose daily, no attempt is being made to formally anticoagulate them. If INR monitoring demonstrates a rise from baseline while on the 1mg dose, the Warfarin should be stopped and daily low-dose aspirin substituted for the remainder of the six weeks. These changes should be instituted by the Orthopaedic team as it is important for us to follow the progress of patients in the protocol. To date, we have had two DVTs and one PE in the patients that are using this protocol. Given the population of around 200 joint replacements treated with the protocol our rate is about 1.5% for thromboembolic complications; quite similar to the national Joint Registry average of ~2%.

We have also decided as a department to have our joint replacement patients started on low dose Aspirin. Unless contraindicated, all our patients will be receiving Aspirin 100mg daily starting immediately post-op and continuing until their six week follow-up visit. Several recent reviews indicate significant cardioprotective effect under this regime.

I apologize for the confusion that has occurred and hope this information helps. If you have any further questions regarding the protocol, please do not hesitate to contact me.
Kind Regards,

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