

## **The Safety of Enoxaparin in Patients Older than 60 years with Acute Myelogenous Leukemia or High Risk Myelodysplastic Syndrome Undergoing Chemotherapy**

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**Objective:** To evaluate the safety of enoxaparin, a Low Molecular Weight Heparin (LMWH) in patients older than 60 years with Acute Myelogenous Leukemia (AML) (Acute Promyelocytic Leukemia (APL) excluded) or high-risk myelodysplastic syndrome (MDS) undergoing chemotherapy.

**Methods:** The medical records of 178 patients undergoing chemotherapy for the above mentioned conditions at the Medical College of Wisconsin between 1995-1999 were reviewed. A retrospective analysis of 13 patients who were exposed to enoxaparin while undergoing chemotherapy including a group of 12 patients with similar condition but not receiving enoxaparin were analyzed as a control group.

**Results:** The two groups were compared; the patients who did receive enoxaparin versus those who did not, the median blood and platelets requirements in units were (8 vs.7,  $p<0.68$ ; 22 vs.18,  $p<0.04$ ) respectively. There was no significant difference in blood units transfused although more platelet units were transfused in the enoxaparin arm which was statistically significant. One patient on the enoxaparin arm developed shoulder hematoma after a fall. All bleeding episodes in both groups were considered minor. No bleeding related deaths occurred. The mean exposure to enoxaparin was  $20.08 \pm 1.17$  days.

**Conclusion:** Enoxaparin is a safe anticoagulant when given for a therapeutic indication to patients older than 60 years with a diagnosis of acute myelogenous leukemia or high risk myelodysplastic syndrome undergoing chemotherapy.