

ABSTRACT

Assessment Of Heparin Anticoagulation By Sonoclot Analyzer In Arterial Reconstruction Surgery

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Since heparin has been in use as an anticoagulant during vascular surgery and medical problems such as DVT or pulmonary embolism, there has been no consensus as to the best method of monitoring its effect on anticoagulation. In this study we used Sonoclot Analyzer to detect hemostasis changes resulting from heparin administration. The study involved 16 randomly selected male patients undergoing peripheral reconstructive surgery. Blood samples were drawn and analyzed in the operating room on the Sonoclot Coagulation and Platelet Function Analyzer. Results showed that patients respond to heparin differently. The Sonoclot monitors the hemodynamics of blood using four variables: SonACT (activated clotting time) time, rate, peak, and contraction rate. Heparin has three effective on the Sonoclot Signature; prolonged ACT result, lower clot rate, and reduction in clot retraction. The SonACT time is the time for first fibrin to form. Prolong this time indicates the presence of anticoagulation. The Sonoclot Analyzer results confirm that it is a reliable and sensitive device for monitoring heparinization levels.