INTRODUCTION & AIM OF THE WORK

In anesthetic practice anesthetists are sometimes faced with patient on anticoagulant therapy and in the meantime is scheduled for surgery. Also, anticoagulant drugs are commonly used to prevent intravascular thromboembolic complications, especially in orthopedic and vascular surgeries.

The term hemostasis refers to mechanisms that minimize or prevent blood loss when blood vessel is opened to prevent cardiovascular collapse and death.

Four interrelated events constitute hemostasis local vasconstriction, formation of a platelet aggregate, formation of blood clot and clot retraction and dissolution ***(Greaves and Taberner, 2000).***

Anticoagulant is a chemical that blocks or inhibits the coagulation process. Some anticoagulants are normally produced in the body and are referred to as physiologic anticoagulants. Others, called therapeutic anticoagulants, are manufactured and can be administred to block coagulation. In clinical practice the anticoagulants are classified to heparin and oral anticoagulants. Heparin may be unfractionated or low molecular weight ***(Rand and Murray, 2000)***.

Heparin is indicated for treatment of deep venous thrombosis, treatment of pulmonary embolism, treatment of acute arterial occlusion, in thromboembolic prophylaxis and during cardiac bypass surgery ***(Spector, 2000).***

While oral anticoagulants are indicated for pulmonary embolism and deep venous thrombosis (following heparin therapy), rheumatic heart disease, following myocardial infarction and prosthetic heart valves, ***(Royston, 1999).***

Preoperative monitoring for a patient on anticoagulant therapy is of critical importance. The commonly used laboratory tests of heparin function are activated partial thromobosplosplastin time (APTT), thromboin-time (TT) and measurements of factor Xa, while the test for oral anticoagulant monitoring is prothrombin time (PT) ***(Mertzlufft et al., 2000).***

AIM OF THE WORK

Anticoagulants are used frequently in preoperative period. Knowledge that these anticoagulants may be used will influence anesthetists decision to use some techniques.

This essay has been suggested to discuss the correct approaches to deal with this dilemma.