**Table 1.** **Viscoelastic Testing`s corresponding parameters and Laboratory Tests 16,21:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **ROTEM®**(Werfen, Spain) | **TEG®**(Haemonetics, USA) | **Quantra®**(Hemosonics, USA) | **Standard Laboratory** | **Hemostatic Factors** |
| **Clot Initiation** | **CT****EXTEM** | **R**(min) | **CT** (min) | **PT** | Coagulation factors; Anticoagulants; FDP; Tissue factor-expression on monocytes |
| **CT INTEM**(s) | **APTT** | Coagulation factors from intrinsic pathway |
| **Clot Kinetics** | **CFT**(s) | **K**(min) |  |  | Coagulation factors deficit, Anticoagulants, Fibrinogen, Platelets. |
| **α angle** (°) | **α angle** (°) |
| **Clot Strength** | **A5, A10**(mm)**MCF** (mm) | **A30, A60****MA**(mm) | **CS** (hPa) | NA | Coagulation factors, Fibrinogen, Platelets, FXIII, Colloids |
| **A10 EXTEM** |
| **A10 FIBTEM** |  | **FCS**(hPa) | **Clauss Fibrinogen** | Fibrinogen(inhibition of platelets to evaluate only fibrinogen contribution for clot strength) |
| **Difference:****A10 EXTEM- A10 FIBTEM** |  | **PCS**(hPa)(PCS=CS-FCS) | **Platelet Count** | Platelet deficit and/or dysfunction |
| **Clot Stability****(Lysis)** | **LI30, LI60** (%) |  **LY30, LY60** | **CSL** | NA | Fibrinolytic enzymes,Fibrinolysis inhibitors,FXIII, Hyperfibrinolysis |
| **ML** (%)ML EXT>15%ML APT: NV |  **Unestablished** |
| **Anticoagulant (Heparin) Assessment** | **CT HEPTEM**(min) | **HTEG** | **CTH** (min) | NA | To evaluate heparin presence or FVIII deficit |
| **Ratio:****CT INT/CT HEP** | **HTEG** | **CTR**Ratio: CT/CTH | NA | Heparin presenceFVIII deficit |

A, amplitude; A5 / A10, amplitude at 5/10 minutes after CT; APT, APTEM; APTT, activated partial thromboplastin time; CFT, Clot Formation time; CS, clot stiffness; CSL, clot stiffness lysis; CT, clotting time; s, second; CTH, CT heparinase; CTR,CT ratio; EXT, EXTEM; FCS, fibrinogen contribution to CS; FDP, fibrin degradation products; FIB, FIBTEM; Fibrin degradation products; HEP, HEPTEM; hPa, hector Pascals units; INT, INTEM; K, Kinectic time; LI, Lysis index; LI30/LI60, Lysis index, residual clot firmness, 30 and 60 minutes after CT in % of MCF; MA, Maximum amplitude; LY30, Lysis 30 minutes after MA in % of MA;MCF, Maximum clot firmness; ML, maximum lysis during run time in % of MCF; min, minutes; mm, millimeters; NA, not applicable; NV; normal value; PCS, platelet contribution to CS; PT, Prothrombin time; R, Reaction time; VET, viscoelastic tests; HTEG assay: is based on Rapid TEG® assay, containing heparinase to neutralize the effect of unfractionated heparine21.