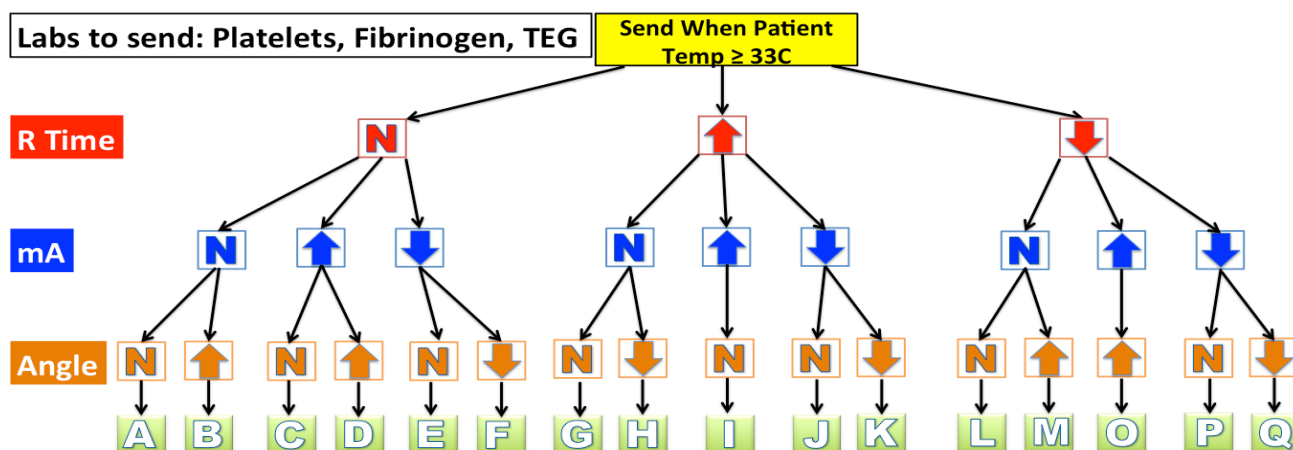


TEG Therapy Algorithm for Clotting Dysfunction



A, B – TEG is normal. Do not transfuse clotting components. Bleeding is anatomic/surgical. Consider transfusion of PRBC if profound anemia and blood viscosity is low. Correct pH, temperature and/or Calcium if abnormal.

C, D – TEG is normal, with supra-normal clot strength. Do not transfuse clotting components. Bleeding is anatomic/surgical. Consider transfusion of PRBC if profound anemia and blood viscosity is low. Correct pH, temperature and/or Calcium if abnormal.

E – TEG is abnormal. Clotting start time is normal, but the clot is weak. Rate of clot formation is normal, the patient is either thrombocytopenic or the platelets are dysfunctional. **Transfuse platelets** (If < 150 give 1 pack, If < 100 give 2 packs, If < 50 give 3 packs). If the patient has a high velocity lesion, or has ESRD, **transfuse ddAVP**. Otherwise for platelet dysfunction, give 2 packs of platelets.

F – TEG is abnormal. Clotting start time is normal, but the clot is weak and rate of clotting is slow. **Follow same as 'E' (above); however if fibrinogen is less than 200, also transfuse 1 pack cryo.**

G, H – TEG is abnormal. Clotting start time is delayed, but the clot is strong. **Ensure that heparin has been fully reversed with protamine.** If ACT is normal, then consider transfusion of 1-2 FFP. If fibrinogen is low, **also** consider transfusion of 1 pack cryo.

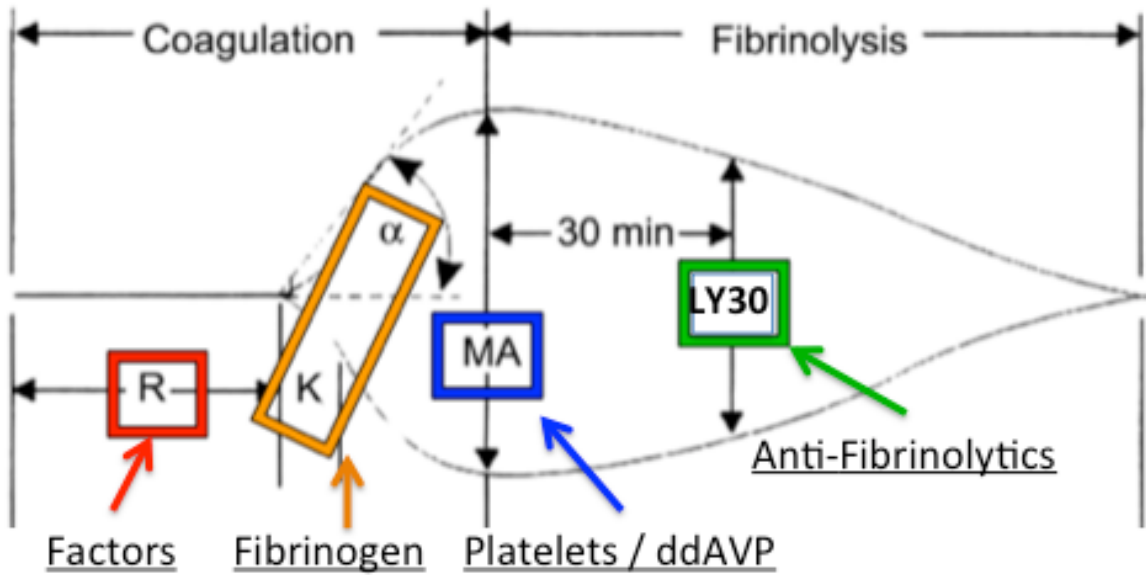
I – TEG is abnormal. Clotting start time is delayed, but clot strength is supra normal. **Do not transfuse!** Strongly suspect residual heparin. **Review total heparin dose.** If patient BMI > 40 , or received anti-thrombin III intraoperatively following very large doses of heparin, consider a protamine infusion of 50mg/hr for a maximum of 5 hours following the bolus dose of protamine. Also verify correction of pH, temperature and hypocalcaemia.

J – TEG is abnormal. Clotting start time is delayed and the clot is weak. **Transfuse 2 FFP and transfuse platelets** (If < 150 give 1 pack, If < 100 give 2 packs, If < 50 give 3 packs). If the patient has a high velocity lesion, or has ESRD, **transfuse ddAVP**. Otherwise for platelet dysfunction, give 2 packs of platelets.

K – TEG is abnormal. Clotting start time is delayed and clot is weak. **Follow same as J; also if fibrinogen is low give 1 unit of cryo.**

L, M, O – TEG is abnormal. Patient is hypercoagulable. **Do not transfuse clotting components.** If DIC, or HIT, **consult hematologist as needed.** If patient on CPB, on ECMO, or has VAD, **verify adequate heparinization.** Patient may need AT III if no response with escalating heparin doses.

P, Q – TEG is abnormal. Clotting start time is fast, however clot is weak. Likely von Willebrand factor deficiency. **Administer ddAVP.** If thrombocytopenia, transfuse platelets (If < 150 give 1 pack, If < 100 give 2 packs, If < 50 give 3 packs).



Normal	Thromboelastogram (TEG)	Values
R Time	5-10	min
MA	50 - 70	millimeters
K Time	1-3	min
Angle	53-72	degrees
LY30	0-8	%

Pre Operative

CT Surgery Team Sends Platelet Mapping TEG

If Platelet function has returned to normal threshold, Consider taking patient to operating room

Intra Operative

Perfusionist/Anesthesia Team Sends Re-Warming TEG at 33C For a Heparinase cup assay.

Results are obtained and relayed to Anesthesiologist and Surgeon. Blood product plan determined if TEG abnormal. *See Scenarios

Anesthesia Team Sends Post Blood Products TEG If blood products were given or if special conditions apply.

Post Operative

If patient did not require second TEG sample Drawn intraoperatively, draw sample 30 minutes Following arrival to ICU

If patient with significant ongoing blood loss, draw Sample upon arrival to ICU with first set of labs/ACT

Otherwise for good hemostasis, additional TEG Sample may not be clinically necessary. Defer.

