

DVT Prophylaxis for Orthopedic Trauma Patients

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- I. Inconsistencies
 - a. Routine use of IVC filters in 80% of the respondents' institutions.
 - b. Screening protocols used in asymptomatic patients by 47% of respondents.
 - c. Over one third (35%) of respondents discharge patients on anticoagulation
- II. OTA Recommendations
 - a. Chemical prophylaxis: The optimal form of VTE prophylaxis is LMWH. Enoxaparin 30mg SQ bid is agent of choice and should be initiated in all trauma patients with musculoskeletal injury (isolated or poly-trauma) within 24 hours if no contraindications. Rating: Strong
 - b. The use of unfractionated low-dose heparin, aspirin (and other anti-platelet medications), and warfarin over low molecular weight heparin in the setting of patients with musculoskeletal trauma is not recommended. These agents are recommended over no prophylaxis when LMWH is contraindicated, not available or prohibitive to patient due to cost or choice. Rating: Moderate
 - c. We recommend combined prophylaxis with calf SCDs and LMWH over either regimen alone provided that no contraindication to either exists. Rating: Strong
 - d. We recommend the use of calf pneumatic compression devices when low molecular weight heparin is contraindicated. Rating: Moderate
 - e. We recommend AV foot pumps as a form of mechanical prophylaxis only in patients whose lower extremity injuries preclude the use of calf pumps. Rating: Moderate
 - f. We recommend initiation of VTE prophylaxis within 24 hours of MSK trauma provided no contraindication exist. Rating: Strong
 - g. We recommend continuation of VTE prophylaxis in patients with musculoskeletal and multi-system trauma for at least one month after discharge. Rating: Limited
 - h. We do not recommend chemical prophylaxis in patients with isolated lower extremity fractures and **"no other risk factors"** for VTE who are able to independently mobilize. Rating: Moderate
 - i. We recommend surgeons discuss prolonged chemoprophylaxis VTE in patients with isolated LE fractures and multiple independent risk factors for VTE. Rating: Consensus
 - j. We do not recommend the routine use of screening protocols for DVT in the asymptomatic trauma patient with musculoskeletal injury. Rating: Strong
 - k. We do not recommend the routine use of inferior vena cava filters for either low or high-risk patient to prevent PE unless the patient has a documented DVT or PE despite appropriate prophylaxis. Rating: Strong
 - l. Patients thought to be at high-risk for VTE with contraindications to acceptable anticoagulant should be considered candidates for prophylactic IVC filter placement. Rating: Moderate -
 - m. While patients with hemodynamically stable solid organ injuries can safely be anti-coagulated after 24 hours provided there is no on-going blood loss, consultation with the general/trauma care surgeon is recommended. Rating: Moderate—
 - n. While patients with closed head injuries and stable serial head CT scans can safely be anti-coagulated after 24-48 hours provided the neurological exam has not worsened, consultation with the neurosurgeon is recommended. Rating: Limited