Introduction
- CPG’s (New Orleans, Canadian, Nexus and NICE) do not apply for anticoagulated patients with MTBI
- Anticoagulated patients include:
  - patients with coagulopathy
  - patients on Warfarin, Clopidigrel, Heparin, Lovenox and New Oral AntiCoagulants (NOAC’s)
    - Dabigatran, Rivaroxaban, Apixiban
- All patients with MTBI on anticoagulation require Head CT irrespective of history or physical exam findings
- Prevalence of intracranial bleeds of anticoagulated asymptomatic patients (No LOC, No Vomiting, Normal Neuro Exam) on initial Head CT
  - Warfarin 11%
  - Clopidigrel 18%
  - NOAC’s Unknown
- Prevalence of delayed bleeding on anticoagulated patients
  - Warfarin—0.6-6% per various studies
  - Clopidigrel—negligible
  - NOAC – unknown

Triage Nursing Evaluation/EMS Arrival:
- **Inclusion**: any patient on an anticoagulant or antiplatelet therapy (Coumadin, Heparin, Plavix, Dipyridamole, Dabigatran, Rivaroxaban, Apixiban) with blunt trauma (including ground level fall)
  - LOC
  - GCS ≤ 15
  - Any signs of trauma to the head or neck
  - Any changes in mental status
- Notify ER physician and bring patient back to a room for evaluation
- Check STAT Coags, CBC, Type and Screen
- Order STAT Head CT,
- Place IV when roomed

Disposition:
- Admit all anticoagulated patients with **Normal** Head CT if:
  - **Symptomatic Patients**—severe headache, persistent vomiting, intoxicated, changes in mental status, poor social support
  - **Asymptomatic Patient** if INR > 3 (high risk of delayed bleed)
  - **Asymptomatic Patients** with poor social situation or intoxication or physician discretion
  - **Asymptomatic Patients** on NOAC’s
• **Asymptomatic Patients** therapeutic or supratherapeutic Coumadin/heparin AND antiplatelet agent
• Consider admission on all patients after midnight with INR 2.4-3.0 for observation on Trauma Service

• Discharge Asymptomatic Patients Home with Normal Head CT after 4 hours of ED Observation if
  • Documented No changes in mental status
  • On Clopidigrel
  • INR < 2.4
  • May D/C if asymptomatic after 4-6 hours of ED Observation if INR between 2.4 - <3.0

**References:**