Prioritized management of airway, breathing, & fluid resuscitation (circulation)

Patient “at risk” for developing LECS*

Patient awake, alert, not intubated & cooperative to examination, with convincing clinical sx/sx. of LECS

Patient awake, alert, not intubated & cooperative to exam WITHOUT any sx. or sx. of LECS

At-risk patient who is obtunded or uncooperative or intubated or has unreliable/questionable PE or equivocal sx./sx. of LECS: NEEDS MEASUREMENT OF LECP

Compartment pressure > 30mmHg OR Diastolic BP – LECP < 30mmHg OR LECP > 25 with associate shock

To OR for operative fasciotomy

*LECS = lower extremity compartment syndrome
*LECP – lower extremity compartment pressure

COMMENTS

At risk indicators:
- associated vascular injury (iliac, femoral)
- venous + arterial injuries
- tib-fib fractures
- major blunt soft tissue injury w/o fracture
- massive fluid administration / massive transfusion
- unexplained or high CPK levels

Physical examination should be repeated at frequent intervals or continuous / repeated compt. pressure monitoring instituted for high risk patients.

Signs / symptoms of LECS:
- unexplained pain
- pain with stretching
- decreased sensory or motor function
- tight fascial compartment

Measurement of LECP may be done using:
- Stryker device, obtained in OR or ICU
- Pressure transducer with slit catheter
- Continuous pressure monitoring devices (Synthes)

LECS is a TIME-SENSITIVE condition
Prolonged LE ischemia may result in irreversible muscle loss or ischemic neuropathy within 5-6 hrs.

MANAGEMENT ALGORITHM FOR LOWER EXTREMITY COMPARTMENT SYNDROME