Acute compartment syndrome

A diagnosis that requires repeated consideration.

INJURY PRIORITIES / ADULT TRAUMA

Escalate suspected compartment syndrome immediately; an evolving examination matters more than one reassuring observation.

01 Recognise evolving signs

Consider pain disproportionate to the injury, pain with passive muscle stretch and increasing analgesic need. Document neurological and vascular status, pain and response to analgesia. Keep a clear time-stamped record.

02 Reassess at-risk limbs

BOASt recommends hourly documented assessment in at-risk patients. Release circumferential dressings when symptoms or signs suggest the diagnosis, with urgent senior review and prompt reassessment.

03 Use pressure measurement wisely

When examination is incomplete or findings are inconclusive, consider pressure measurements in all suspected compartments with concurrent blood pressure. Interpret results and trends with a senior surgeon; no isolated reading replaces judgement.

04 Treat & plan follow-up

A diagnosis requires immediate surgical decompression. Document the compartments treated and tissue viability. Arrange a soft-tissue plan, repeat assessment and specialist input for wound closure or coverage.

WATCH POINT Sedation, impaired consciousness or regional blockade can obscure symptoms. Explicit monitoring responsibility is essential.

DISCUSS WITH THE TEAM

Who is examining this limb next, and what finding triggers an immediate operation?

READ THE SOURCES

[1] BOASt: Compartment Syndrome of the Extremities (revised July 2025).