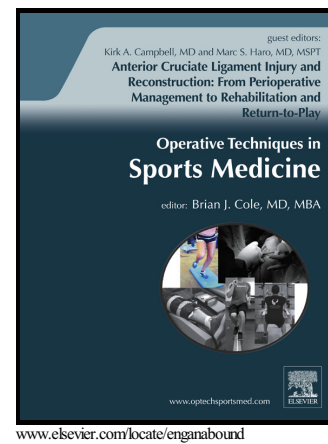


# Author's Accepted Manuscript

## Chronic Exertional Compartment Syndrome: The Athlete's Claudication

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KEYWORDS:

1. Chronic exertional compartment syndrome
2. Anterior tibial syndrome
3. Intracompartmental pressures
4. Fasciotomy
5. Lower leg

ABSTRACT

Chronic exertional compartment syndrome (CECS) of the lower leg can be a disabling condition in active individuals. CECS is characterized by cramping or aching pain of the affected extremity with physical activity, frequently running. Symptoms resolve with rest. Usually, it is bilateral, affecting one or more of the compartments of the lower leg, with findings of increased intracompartmental pressure (ICP). Most commonly, the anterior compartment is affected, followed by the lateral compartment. Although recent studies have demonstrated improvements with a change in running style, non-operative management is generally ineffective in controlling symptoms if the patient continues to engage in the inciting activity. An elective fasciotomy of the affected compartment either through a medial (deep and superficial posterior compartments) or lateral incision (anterior and lateral compartments) may provide relief to the affected individuals. Proper patient selection for surgical management increases the likelihood of success, with relief of symptoms upon return to sport or recreation. Patients are usually able to return to or exceed pre-operation activity levels with decreased pain. However, the rate of positive outcomes is significantly lower than those for other elective orthopedic operations. Evidence varies regarding success rates, recurrence of symptoms, and return to activity. Approximately 75% of patients are satisfied

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