

Iliac Artery Endofibrosis

Iliac artery endofibrosis is a rare cause of exercise-induced leg pain in the young, healthy adult, typically affecting high-intensity endurance athletes e.g. cyclists, triathletes. The underlying cause continues to be debated, but the likelihood is that repetitive flexion and extension of the hip joint chronically injures the external iliac artery (EIA) leading to elongation and kinking. With time the kinking predisposes the EIA to the development of a fibrotic stenosis (narrowing). The stenosed EIA reduces blood flow resulting in claudication type symptoms: thigh pain and leg weakness which resolve quickly with rest. Initially, this may be mild occurring only during high-intensity exercise, but as the degree of stenosis increases the symptoms deteriorate occurring at low-intensity exercise. Because arterial disease is unexpected in these healthy atheletes accurate diagnosis of IAE is often delayed or missed with symptoms often mistakenly attributed to musculoskeletal or nerve entrapment causes.

Currently there are no guidelines on how best to treat IAE. It is generally accepted that cessation of exercise will halt disease progression, however this may not be practical nor acceptable by high-end athletes. Surgery to correct the underlying abnormality is the mainstay of treatment with EIA endarterectomy being the preferred intervention. However, there is little robust data relating to long-term outcomes particularly if individuals continue to participate in high-intensity exercise.

