



## Dissection of the Arteria iliaca externa, secondary to endofibrosis in a cyclist

Charlotte SCHEPENS<sup>1</sup>

Marie HUTSEBAUT<sup>2</sup>

Bruno VANHECKE<sup>3</sup>

Mathieu MAROY<sup>4</sup>

From AZ Delta Roeselare, Roeselare, Belgium

<sup>1</sup> Department of Physical Rehabilitation and Sports Medicine  
University Hospital Ghent, Belgium and AZ Delta, Roeselare,  
Belgium

<sup>2</sup> Department of Physical Rehabilitation and Sports Medicine  
University Hospital Leuven, Belgium and AZ Delta, Roeselare,  
Belgium

<sup>3</sup> Dr. in the department of Physical Rehabilitation and Sports  
Medicine AZ Delta, Roeselare, Belgium

<sup>4</sup> Dr. in the department of Physical Rehabilitation and Sports  
Medicine AZ Delta, Roeselare, Belgium

Correspondence: Dr. Charlotte Schepens,  
Department of Physical Rehabilitation and Sports Medicine  
University Hospital Ghent, Belgium and AZ Delta, Roeselare,  
Belgium

AZ Delta Roeselare, Brugsesteenweg 90, 8800 Roeselare, Belgium,  
Telephone: 0032498468842,  
Charlotte.Schepens@UGent.be

©

Dissection of the Arteria iliaca externa in a cyclist, secondary to endofibrosis, is a uncommon complication of this syndrome. The objective of this clinical case report is to highlight this unusual injury to avoid incorrect diagnosis.

A twenty-six-year old cyclist, who cycled in the elite youth category as a teenager, presented with acute onset of anterolateral pain in the right leg during a 80-kilometre cycling race. The pain resolves quickly when ceasing the effort. Minimal endurance training results in a stinging thigh pain. He experiences no pain during activities of daily living.

The last three years he reduced his trainings load due to patellafemoral pain syndrome and was arthroscopically treated therefore. After treatment he intensified his training schedule. The patient reported a history of rapid muscle fatigue during endurance training in the past.

Further investigation with computed tomography (CT) angiography showed a dissection of the Arteria iliaca externa with an accompanied thickening of the arterial wall. More precisely the dissection was located on the place with impression of the hypertrophic M. psoas, due to repetitive flexion of the hip, on the Arteria iliaca externa.

Additional history revealed no personal or family history of collagen vascular disease.

The plan of treatment is going to be determined together with vascular surgery taking into account his previous level of activity, more specifically cycling at a competitive level.

There are multiple options as a treatment: Conservative approach, stenting techniques, transluminal angioplasty or endofibrosectomy with patch angioplasty.

Surgery has the preference in patient with a cycling background and especially for those who want to continue on their level of training. Follow-up has been planned.

Dissection of the Arteria iliaca externa is a rare diagnosis but must be considered in endurance athletes.