Clinical vignette

Arterial thoracic outlet syndrome

A 32-year-old man, without previous medical history, presented with a 2 month history of severe RP involving his right hand, which was exacerbated when he practised his profession of house painter. On examination, his right hand was normal; the right wrist pulse decreased with Wright’s hyperabduction test. General physical examination was otherwise normal. Autoantibody screening tests (RF, ANA) were negative. Nailfold videocapillaroscopy proved normal. Arterial and venous Duplex ultrasonography of the upper limbs were also normal. CT with 3-dimensional reconstruction showed compression of the right subclavian artery in dynamic studies without arterial wall damage at rest (Fig. 1A and B). The diagnosis of arterial thoracic outlet syndrome (TOS) was made. The patient underwent resection of his right first rib via the supraclavicular approach. He did well and was discharged from the hospital with no complication.

Arterial TOS is a rare cause of shoulder pain and RP due to compression of the subclavian artery within the thoracic outlet. It is the least common form of TOS, accounting for <1% of overall TOS cases. However, arterial TOS is potentially dangerous, as it may lead to acute onset of upper limb ischaemia and intimal damage/aneurysmal degeneration of the subclavian artery related to chronic compression. Knowledge of arterial TOS is crucial, resulting in both prompt diagnosis and management.

Funding: None.

Disclosure statement: The authors have declared no conflicts of interest.

Mathilde Leclercq\textsuperscript{1} and Isabelle Marie\textsuperscript{1}

\textsuperscript{1}Department of Internal Medicine, CHU Rouen, Rouen, France.

Correspondence to: Isabelle Marie, Département de Médecine Interne, CHU de Rouen, 76031 Rouen Cedex, France. E-mail: isabelle.marie@chu-rouen.fr

© The Author 2014. Published by Oxford University Press on behalf of the British Society for Rheumatology. All rights reserved. For Permissions, please email: journals.permissions@oup.com