Images in cardio-thoracic surgery

Transient thoracic duct obstruction in a patient with thoracic outlet syndrome

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A 51-year-old woman with a thoracic outlet syndrome and vascular compression (Fig. 1) developed a transitory cervical and mediastinal lymphoedema (Fig. 2) after sleeping for a night with her arms raised and abducted. We hypothesize that this unusual complication was caused by a temporary obstruction of the thoracic duct at its junction with the venous system due to this sleeping position.

Fig. 1. A magnetic resonance imaging (MRI) angiography performed with the patient with both arms raised above the head demonstrated a thoracic outlet syndrome with segmental occlusion (arrow) of the left subclavian artery (A) and vein (B).

Fig. 2. A MRI revealed a lymphoedema of the neck and mediastinum (arrow) (A, STIR image) that spontaneously disappeared in a few days. A MRI performed after a week was completely normal (B, T2-weighted image). The patient was conservatively treated. A physiotherapy program was started and she was encouraged to sleep with arms by the side. At the time of writing, 1 year after the event, the patient had experienced no further episode of cervical oedema.