

Superior vena cava syndrome due to mediastinal adenomatous goitre

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Accepted 23 May 2015

DESCRIPTION

A 60-year-old man presented with an 18-month history of deteriorating facial oedema and intermittent oedema of upper limbs. He had symptoms of headache, flush, dysphagia and coughs. He also noted hoarseness or dysphonia after standing for long periods. He had no other physical findings. MRI showed a superior to middle mediastinal mass derived from the right lobe of the thyroid, compressing the trachea to the left (figure 1, arrow heads). MR venography revealed severe stenosis of the right innominate vein indicating stasis of

contrast medium, and remarkable collateral vessels along the vertebrae (figure 2A, arrows and arrow heads, respectively). The left innominate vein was also compressed by goitre (figure 2A, arrow on the left of the mass). The patient successfully underwent right lobectomy of the thyroid via a neck approach with collar incision. Pathological diagnosis was nodular hyperplasia including incidental micropapillary carcinoma. The stasis of veins was found entirely resolved in a 2-week follow-up visit (figure 2B, arrows).

Most superior vena cava (SVC) syndromes are caused by malignancies (eg, lymphoma and lung cancer).¹ Although a goitre sometimes enlarges into supra mediastinum, SVC syndrome is a rare complication to be found.^{2 3} However, a mediastinal large goitre may cause SVC syndrome, as in the case presented above. In this exceptional case, the goitre caused SVC syndrome even though the goitre was not detected in the physical examination, because of its limited presence in the mediastinum.

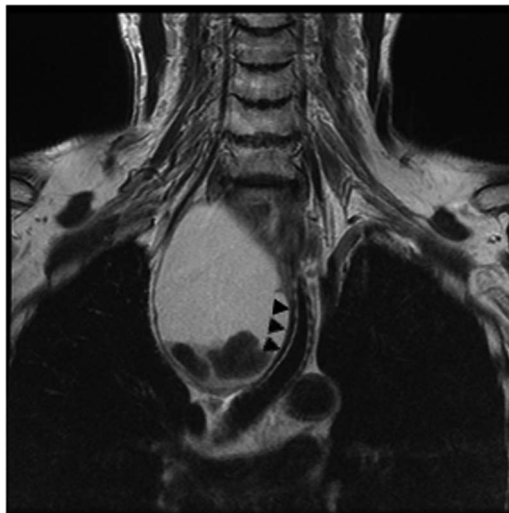


Figure 1 Plain MRI shows a superior to middle mediastinal mass expanding from right thyroid gland, compressing the trachea to the left (arrow heads).

Learning points

- ▶ Mediastinal goitre may cause superior vena cava syndrome by compressing bilateral brachiocephalic veins.
- ▶ A goitre may not be detected by physical examination because of its limited presence in the mediastinum.
- ▶ Mediastinal goitre can be successfully removed through a cervical approach.

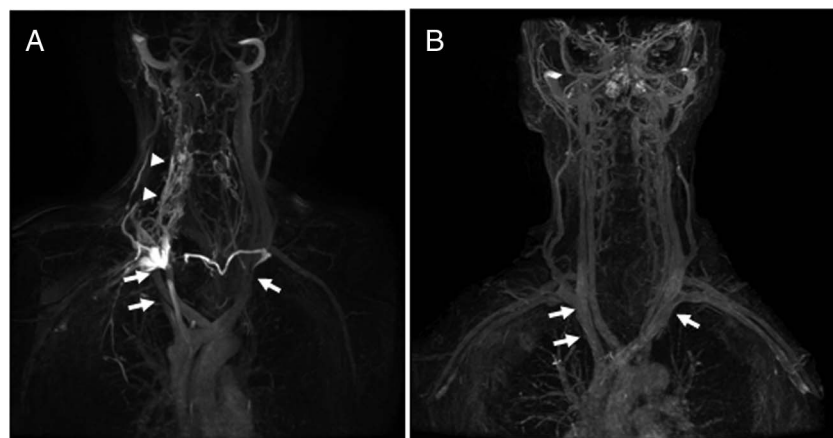


Figure 2 (A) MR venography shows severe stenosis of right innominate vein with stasis of contrast medium (arrows on the right side of the mass), and collateral vessels along vertebrae (arrow heads). Left innominate vein is also compressed (arrow on the left side of the mass). (B) MR venography in a 2-week follow-up visit indicates stenosis and stasis resolved entirely (arrows).



To cite: Katoh H,
Enomoto T, Watanabe M.
BMJ Case Rep Published
online: [please include Day
Month Year] doi:10.1136/
bcr-2015-210634

Contributors HK, TE and MW identified and managed the case.

Competing interests None declared.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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