

Virchow's Node¹

Narrative Section

HISTORICAL VIGNETTE / CASE STUDY -

A 72 year old man presented to the clinic with a 10 pound weight loss over the past year and swelling of the area of his left clavicle. He denied fever, chills, or night sweats. His examination was notable for being afebrile, a BP = 127/81, a pulse = 72, and respirations = 18. He had no cervical or axially adenopathy. His left supraclavicular fossa had a large, 2 cm. soft, rubbery, and mobile non-tender lymph node. His lung and cardiac examination was normal. His abdomen had normal bowel sounds, was non-tender to palpation, and he had a liver span percussed at 9 cm. at the mid-clavicular line. His spleen was not palpable.



What clinical abnormality does this enlarged lymph node most likely represent? What is the physiology that leads to its enlargement?

CONTEXT AND USEFULNESS - A thorough lymph node exam can elicit subtle abnormalities at the bedside. Understanding lymphatic physiology and knowing the drainage of the lymph node system helps predict diagnoses. It can also help focus the diagnostic evaluation.

Special thanks to **Dr. Lars Osterberg** for submitting this 5M2.

¹ Chi J *et. al.* "The Five Minute Moment." *Am J Med.* **2016 Aug**; 129 (8): 792-795.

Physical Manuever

Model Proper (And Improper) Technique - Virchow's node lies near the junction of the thoracic duct and the left subclavian vein, where the lymph from most of the body drains into the systemic circulation. Tumor spread of gastrointestinal cancers via the thoracic duct usually leads to the enlargement of the left supraclavicular node. Virchow's node (also known as Troisier's node or **Troisier's sign**) can be the first clue to a GI malignancy.² For this reason, they are also called sentinel or signal nodes.

A method for examination of the supraclavicular lymph nodes:

- 1) **Have patient seated upright** and facing forward as you palpate the supraclavicular fossa
- 2) **Ask patient to perform the Valsalva** during the examination, which can help bring out an otherwise unapparent lymph node
- 3) **Instruct the patient to tilt their head** to the side being examined which can help in feeling deeper into the supraclavicular fossa



INTERPRETATION - Stomach cancer primarily presenting with Virchow's node (Troisier's sign) without any other symptoms is very uncommon. It is important to know that metastasis to the supraclavicular lymph node indicates stage 4 disease. Although Virchow's node / Troisier's node is typically enlarged in gastric cancer, it can also be seen in lung cancer and lymphoma, as well as breast, esophageal, pelvic, and testicular cancers.³

CASE FOLLOW UP - On biopsy one week later, the patient was found to have angioimmunoblastic T-cell lymphoma .

² Siosaki and Souza. "Virchow's Node." *N Engl J Med.* **2013**; 368: 6.

³ Baumgart and Fischer. "Virchow's Node." *Lancet.* **2007**: 370: 1568.