Vocal cord paralysis CT anatomy

- Vocal cord paralysis can be caused by a tumor affecting either recurrent laryngeal nerve.

- The right recurrent laryngeal nerve arises from the vagus nerve and courses under the right subclavian artery, and back up to the larynx.

- The left recurrent laryngeal nerve courses under the aortic arch, which is a little lower, and lower than typical neck CT coverage, and then back up to the larynx.

- Therefore, anytime there is vocal cord paralysis, especially left, the scan must cover the entire left AP (aortopulmonary) window.
Middle of arch, not far enough to cover all of left recurrent laryngeal nerve
AP window

Imagine left recurrent laryngeal nerve here in yellow looping under arch. Sometimes masses cause nerve dysfunction here.
Pulmonary artery –
make sure at least some of pulmonary artery is seen to ensure coverage of AP window, and allow radiologist to distinguish a soft tissue lesion from the pulmonary artery.