

The Anterior Lower Neck: 3 Patterns of Dysfunction

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My writing has focused primarily on the lower back over the past few years. It is time to switch gears and look at the upper half of the body, starting with the anterior aspect of the lower neck. What symptoms indicate a potential problem involving the front of the neck? The patient can experience neck pain, loss of range of motion, upper trapezius area tightness and/or pain, pain in the upper thoracic area, and/or referred pain or true radicular pain down the arm. When the patient has a chin-poke posture, tension often develops in the front of the neck. (I wrote about the clinical patterns in the mid- and lower cervical spine eight years ago.)¹

Correctable Patterns of Dysfunction

1. Anterior (positional) fixation of the lower neck. These are lower cervical segments that resist posterior glide and ipsilateral lateral bending.
2. Fascial restriction of the anterolateral neck. If you think in terms of muscles, this is over the scalenes and SCM. If you think fascia, think of the various layers of the anterior cervical fascia. I will address both exercise and soft-tissue techniques for this restriction.
3. Either a depressed and downwardly rotated shoulder, or an elevated shoulder. The depressed pattern is not as well-understood. It usually indicates upper trapezius inhibition and/or weakness.

1. Anterior Lower Cervical Fixation

At the top of my most-missed list for the neck is the anteriorly fixated lower cervical segments.² I continue to appreciate the lower force, non-thrust methods. Check out my [YouTube video](#) on this.³

Do you palpate the front of the neck? It is a critical area. If you can feel a pulse, you are too far anterior, over the carotid artery. Palpate the anterior neck with the patient sitting. When the patient is supine, gravity somehow relaxes the offending structures and you can easily miss the fixation and/or restriction.

Sit the patient up and stand either behind or in front of them. Start with your palpating hand on the SCM; remember that this muscle runs obliquely inferior and anterior. Up high, at the C3-4 level, you can palpate the pillars of the cervical spine in front of the SCM. Down lower, over the C5-6-7 level, your palpation is directly through the SCM muscle.

Use your opposite hand on the top of the head to slightly flex and laterally bend the neck. This creates relaxation in the SCM and scalenes. You will usually find a specific tender spot. If you motion palpate place one hand on the head and the other on the anterior lower cervical spine; you will find, as your upper hand takes the whole neck into flexion and homolateral lateral bending, that a specific segment

cannot glide backward. This is the "anterior" cervical. Gentle, sustained pressure here, anterior to posterior, will often reproduce arm or upper back symptoms.

2. Tight Fascia

Anterior head carriage will produce increased tension in the front of neck. Demonstrate this to the patient. Touch the tight anterior fascia and then have them gently retract their neck; activating the deep neck flexors, not the scalenes and SCM. This will usually begin to release the fascia. Point this out to the patient.

I've tried so many methods to help soften this fascia. In my practice, this is usually a chronic pattern that is likely to take some time to permanently change. My conclusion: There are no silver bullets that always work. You have to test and recheck. Here are some of my favorite treatment options:

a. YAP (Yank Away Pain) is new to me and probably new to you, too. It focuses on the irritated peripheral nerves as the source of ongoing fascial tightness, and involves grasping the tissue and pulling with your fingers or a silicon suction cup. You are pulling, not pushing. You will have to try this to understand how profound that concept may be. I send my patient home with a small silicon suction cup if the YAP approach works.

b. I have used Graston technique (IASTM) or other deep-tissue variations for many years. I am always looking for manual therapies that my patients can do for themselves at home. Both YAP and Graston lend themselves to that. If Graston works, they will go home with a small *gua sha* tool.

Note: In both cases, the patient does need instruction on how to effectively use these tools.

c. Some patients will respond best to more subtle forms of myofascial release or counterstrain.

d. Sometimes electric stim modalities are useful here; sometimes laser helps. Palpate, apply the soft-tissue techniques and then recheck!

e. Exercise tweaks: I will show the patient both stretches and strengtheners. It is often useful to activate the muscles, rather than just stretch them. The [chin-to-collarbone exercise](#),⁴ an oblique deep neck flexor activation, is surprisingly effective here.

The test-retest is simple: Find a provocation position or motion of the neck and/or find a tender place in the anterior neck. Have the patient activate the correct muscles and see if the tests improve.

3. The Inhibited Upper Trapezius: When the Shoulder Is Low

I think one of the biggest errors we make is only looking at the upper trapezius as a short, tight muscle. I wrote about this in 2013⁵ and it deserves repeating. You will tend to find the classic trigger point at the origin of the levator scapula.

Think of the upper trapezius not as a triangle-shaped muscle, but as a band that goes from the lateral

clavicle to the base of the neck. The thickest fascicles of the upper trapezius muscle are the ones that originate from C7 and T1.⁶ I appreciate Mark Comerford of Kinetic Control for teaching me this concept.

The question is: Which side is the neck, shoulder or cervical nerve root pain on? Is it the high shoulder side or the low shoulder side? When the pain is on the low shoulder side, the upper trapezius is not doing its job; it is a weak stabilizer letting the shoulder drop. Yes, this coexists with the usual muscle imbalances you probably already address: tight pectorals and weak middle trapezius.

When the shoulder drops, the weight of the upper body "tractions" the whole brachial plexus, aggravating neck and arm pain. The classic example is Bakody's sign, when the cervical disc patient gets relief by placing their hand on their head. The clinical audit profile and the rehab protocol are well-stated in my 2013 article on the upper trapezius.

Have I covered everything about the lower neck? Of course not. I am trying to give you some highlights and clinical tips that may help you with a few more patients. Keep up the good work.

References

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3. YouTube video: correcting anterior lower cervical fixation. <https://youtu.be/4XZJtFYh0eA>.
4. YouTube video: exercises for the oblique deep neck flexors (scalene strength): chin to collarbone. <https://youtu.be/Ps2102cdiZo>.
5. Heller M. "How Upper Trap Weakness Contributes to Neck Pain, Nerve Root Pain and Shoulder Impingement." *Dynamic Chiropractic*, Nov. 1, 2013.
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