

THE EDITOR'S CORNER

The Winged Scapula

The “winged scapula” is a classic question on medical and dental board examinations. It occurs when the stabilizing relationship between the scapula (shoulder blade) and the rib cage is disrupted, most commonly due to dysfunction of the serratus anterior muscle. The result is visually striking on physical examination: the scapula lifts and protrudes rather than lying flat. Muscles that normally function in coordinated opposition fall out of balance, and efficient movement gives way to compensation.

Think of the scapula as an old Western holster hanging from a belt. The anterior portion of that belt is the serratus anterior, which holds the scapula against the rib cage, while the posterior portion is formed by the rhomboids (major and minor). When the long thoracic nerve is injured, serratus anterior function is lost, and the anterior restraint fails. The rhomboids contract unopposed, pulling the scapula backward and producing the pathognomonic winged scapula—not from excess force, but from imbalance.

Dental students learn about this condition because it can signal head and neck malignancy with regional lymphatic spread. Tumor infiltration of the long thoracic nerve, arising from the brachial plexus (C5-C7), disrupts neuromuscular control of the serratus anterior. When this stabilizing influence is lost, the scapula pulls away. Recognition of this finding, particularly when accompanied by abnormal cervical or supraclavicular lymph nodes, may prompt timely referral and alter the course of disease.

That same pattern is familiar to orthodontists. Incisor position is governed by a constant, often invisible tug-of-war between the lips and the tongue. When those forces are in quiet opposition, teeth remain stable within their neutral zone. When that balance shifts—through habit, growth, or treatment mechanics—teeth predictably tip, flare, or relapse. This dynamic extends to anchorage: when restraint is underestimated, teeth drift toward the path of least resistance.

We are adept at recognizing these shifts in our patients, but far less practiced at noticing them in ourselves. Our lives are shaped by competing forces—work, family, obligation, and expectation—each exerting pressure in different directions. Over time, that pressure turns inward. Am I a good orthodontist? Was the treatment plan correct? These questions linger. Life continues to function under this load, sustaining performance while drawing on physical and mental reserves.

These struggles are not signs of weakness; they are evidence of engagement. Feeling stretched, uncertain, or temporarily unsettled in work and in life reflects an active system at work, with attention fully engaged and neurons firing. This ongoing push and pull is normal and, from what I can gather, necessary for growth and judgment. Problems arise only when force is applied for too long or too strongly in one direction without awareness. That, ultimately, is the larger lesson of the winged scapula.

As a dental student at the University of Pennsylvania, I encountered chronic stress for the first time under sustained academic pressure that was largely self-imposed. I was learning, imperfectly, how to balance ambition with endurance. During that challenging time, I took refuge in Gordon Levenson's foundational anatomy course. Anatomy offered clarity and confidence when everything else felt unsettled. My favorite pearl was realizing that under tension, our muscles pull toward their origin, much like we do.

The winged scapula is not merely a diagnosis; it signals that balance has been lost and that intervention is required. Orthodontics offers familiar parallels, yet imbalance is rarely confined to the structures we treat. Chronic stress, fatigue, and competing demands in our own lives can quietly erode judgment, attention, and restraint in much the same way. Recognizing it early, in our patients and in ourselves, restores equilibrium before compensation takes flight in the wrong direction.

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