Scapular winging (SW) is caused by weakness of trapezius, rhomboids, and serratus anterior muscles. The different patterns of scapular movement among these causes assist in the differential diagnosis and are illustrated in the 3 described cases (table e-1 on the Neurology® Web site at www.neurology.org).

Case 1 (figure 1, A–C) presented with right SW (lateral displacement of superior angle that became evident at arm abduction) due to upper trapezius weakness and atrophy that is also evident on shoulder MRI (figure 1D and figure e-1). Case 2 (figure 1, E–G) had right SW (lateral displacement of inferior angle that was accentuated when the patient pushed his elbow backwards against resistance) due to rhomboids weakness. Case 3 (figure 1H) had right SW (medial displacement of scapula that was enhanced during forward arm flexion) due to serratus anterior weakness.

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