Common Upper Cervical Instability (UCI) **Symptoms and mechanical responses** of symptoms in patients with symptomatic generalised hypermobility

TABLE 2 Symptoms suggestive of musculoskeletal or neurological upper cervical instability.

	Common	Highly suggestive
Musculoskeletal UCI		
Heavy/bobble head, patient feels like they need to support or brace their head to decrease symptoms		x
Apprehension about initiation or maintenance of neck movement or travel in vehicle		x
Lump in throat, trouble swallowing		x
Consistent clicking or clunking in the neck associated with neck movement		x
Cervical sensorimotor symptoms such as tinnitus, dizziness		x
Suboccipital headaches	x	
Yoke/coat-hanger distribution pain	x	
Neck tension, muscle spasm	x	
Brain fog	X	
Inconsistent or poor response to treatment for the neck	X	
Sleep disturbance, snoring, sleep apnea	x	
Neurological UCI		
Report of seizure-like activity, diagnosis of "non-epileptic seizures" or "pseudo seizures"		x
• Drop attacks not associated with dysautonomia (e.g., provoked by neck motion, or without dizziness common in POTS)		x
Lump in throat, choking, trouble swallowing, voice changes		X
Symptoms of dysautonomia (especially if not responding to standard treatment), persistent anxiety, functional GI dysfunction, poor temperature regulation, heat intolerance, presyncope,	х	x
"Boat rocking" instability (not due to musculoskeletal issues)		x
Ataxia: Poor coordination (not due to joint instability)		x
Facial tingling/numbness		x
Pulling sensation in face, head, teeth, tongue (muscle contraction, not just pain)		x
Vision changes-trouble with convergence, double vision, aura (teichopsia)		x
Dystonia: Involuntary muscle contractions causing involuntary movements or postures		x
Intermittent dysesthesias in the limbs, not associated with local issues		x
Sleep disturbance, snoring, sleep apnea	X	
Cognitive changes		x

TABLE 3 Symptoms of upper cervical instability (UCI) are altered by neck movement and/or position.

- Increased symptoms with neck motion into, or when held in, flexion, extension, and/or rotation, especially increased neurological symptoms
- Apprehension about neck extension (e.g., washing hair, going to the hairdresser)
- Increased symptoms when leaning forward, looking down
- Increased symptoms with forward head posture, e.g., using computer keyboard
- Increased symptoms when upright with neck unsupported
- Decreased symptoms when in neutral or wearing a neck brace
- Apprehension, anxiety, or fear of manual exam to the neck

Russek LN, Block NP, Byrne E, Chalela S, Chan C, Comerford M, Frost N, Hennessey S, McCarthy A, Nicholson LL, Parry J. Presentation and physical therapy management of upper cervical instability in patients with symptomatic generalized joint hypermobility: International expert consensus recommendations. Frontiers in Medicine. 2023 Jan 18;9:4020.