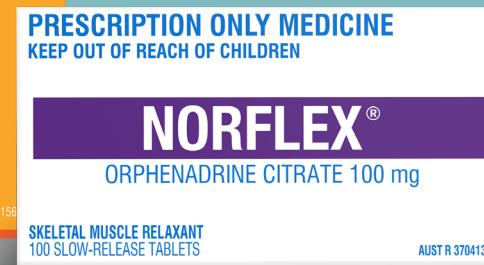


SPASM?

Nothing like



1-4



SPOT THE SPASM **CLINICAL TOOL**

This in-clinic tool is designed to help facilitate discussions and assessment of painful muscle spasm in your patients.

inova
pharmaceuticals

PAGE FOR HEALTHCARE PROFESSIONALS ONLY

THE NECK

RULE OUT THE PRESENCE OF RED FLAGS⁵

- Significant trauma
- Constitutional symptoms (including fever, weight loss, anorexia)
- Ripping/tearing sensation
- Infection
- Rheumatological conditions
- History of past or current malignancy
- Concurrent chest pain, shortness of breath and/or diaphoresis
- Neurological signs/symptoms



If any red flags are present consider referral to a specialist

ASSESSING THE NECK FOR MUSCLE SPASM



What to look for?^{6,7}

How is the:

- Alignment of the patient's head, neck and spine?
- Posture - is the head forward or upright?
- Symmetry - is one shoulder sitting higher than the other?



What to feel for?^{7,8}

Is there tenderness or spasm in:

- Paraspinal or upper trapezius muscles?



How is the patient moving?^{6,8}

Are they:

- Staying rigid or guarding their movement?

Check their range of motion:

- Neck rotation of 90°
- Neck lateral flexion of 45°
- Neck forward flexion to 60°
- Neck backward extension to 75°
- Shoulder forward flexion to 90° (arms out forward); continue to 180°
- Shoulder abduction to 90° (arms out to the side); continue to 180° (palms touch over head)

If any of the above assessments indicate the presence of painful muscle spasm, consider whether a non-opioid, non-benzodiazepine skeletal muscle relaxant, such as NORFLEX, may be appropriate.²

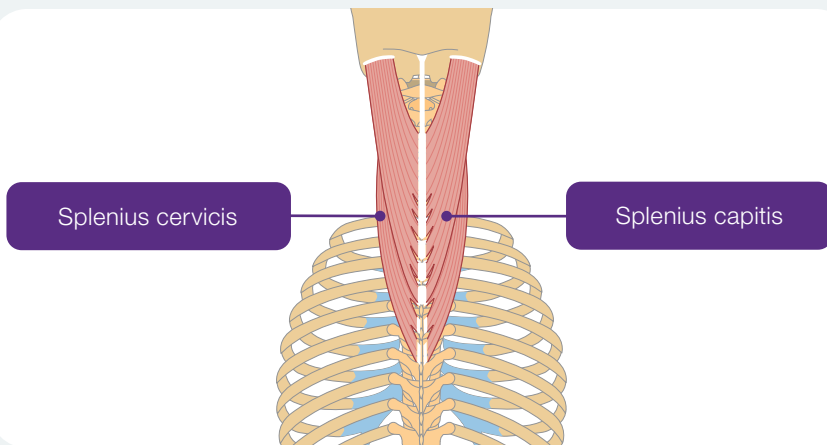
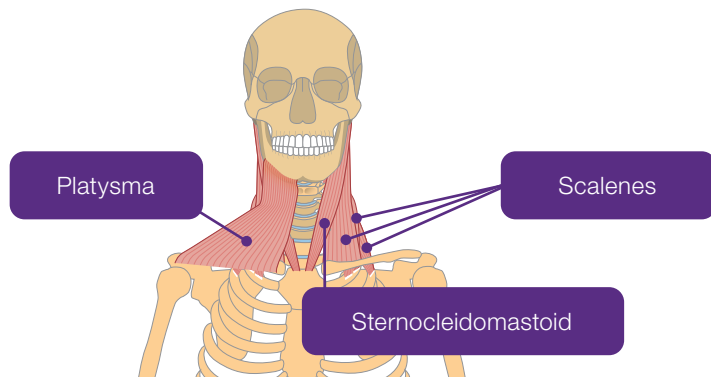
Scan the QR code to learn more, access clinical resources and explore patient case studies



THE NECK

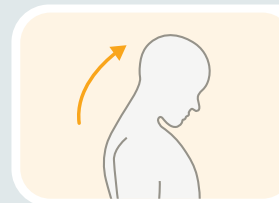
Muscles in the neck

There are many muscles in the neck, all working together to move your head and neck up and down, side to side or tilting. They include:^{9,10}

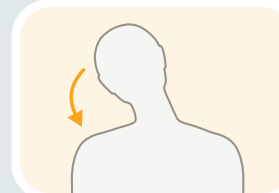


Assessing the neck

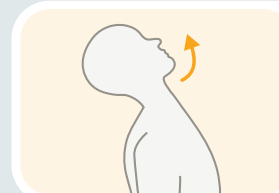
Check for the presence of muscle spasm with the below exercises:⁸



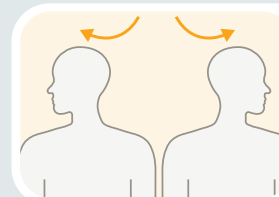
Putting your chin on your chest



Touching your right ear to your right shoulder (without moving your shoulder), repeat on left side



Tipping your head back to look at the sky



Looking over your right shoulder, then over your left shoulder (aim for 90 degrees)

THE LOWER BACK

RULE OUT THE PRESENCE OF RED FLAGS¹¹

- Infection
- Malignancy
- Spinal cord pathology
- Cauda equina compression
- Visceral disease
- Ankylosing spondylitis
- Fracture



If any red flags are present consider referral to a specialist

ASSESSING THE LOW BACK FOR MUSCLE SPASM



What to look for?^{8,12}

Observe the patient both standing and sitting.

How is their:

- Posture – are they hunched over or tilting to one side?
- Pelvic tilt – with the patient standing place your hands on the iliac crests and check if they are parallel



What to feel for?^{8,12}

Feel or tap the muscles and spiny processes:

- Is there tenderness anywhere?
- Are there any areas of tension or spasm?



How is the patient moving?^{8,11}

Are they:

- In obvious pain?
- Walking slowly or with difficulty?
- Fearful of movement and avoiding activity?

If any of the above assessments indicate the presence of painful muscle spasm, consider whether a non-opioid, non-benzodiazepine skeletal muscle relaxant, such as NORGESIC, may be appropriate.¹

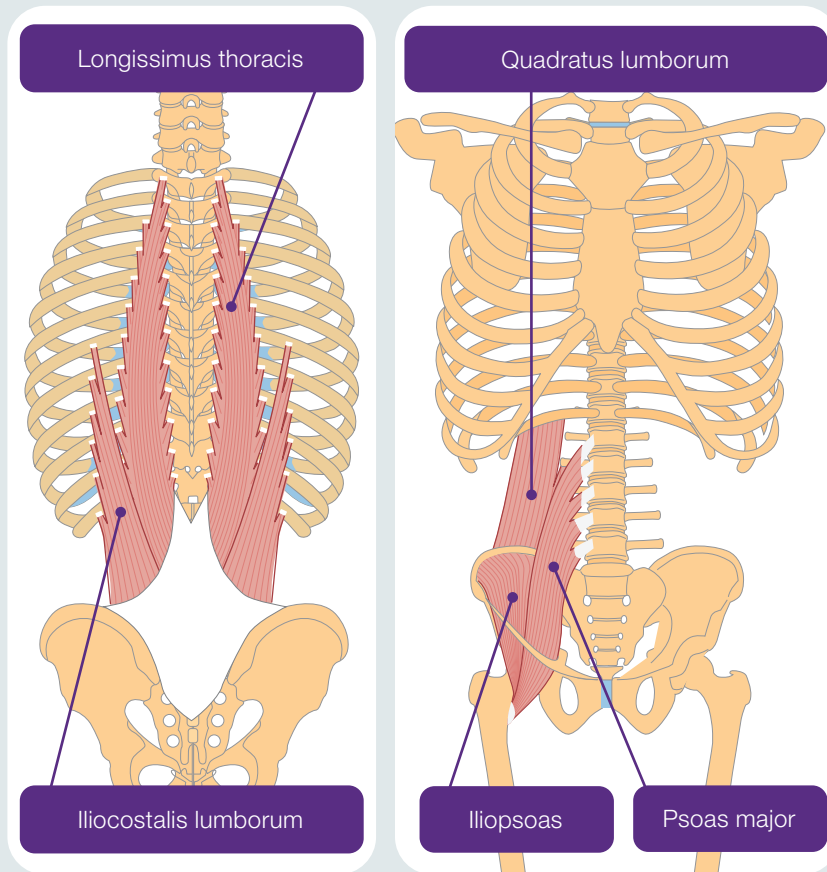
Scan the QR code to learn more, access clinical resources and explore patient case studies



THE LOWER BACK

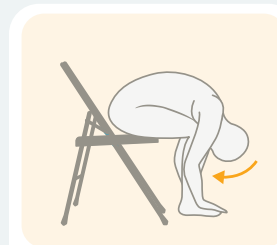
Muscles in the lower back

The muscles of the lower back help you move your torso as well as stabilise and protect your spine. They include:¹³



Assessing the lower back

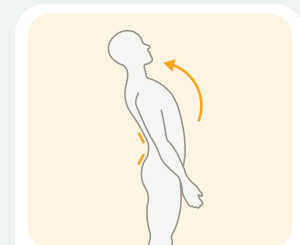
Check for the presence of muscle spasm with the below exercises:⁸



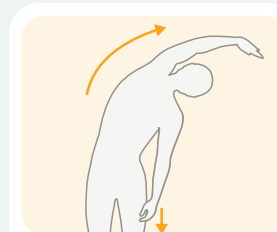
While sitting, place your nose on your knee (without lifting your leg)



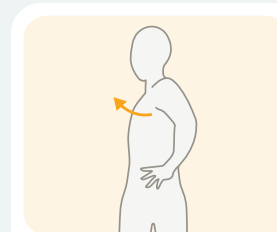
While standing, touch your toes



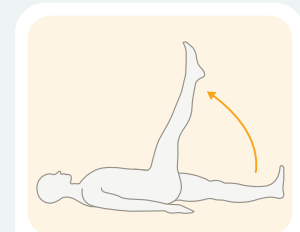
Stand up and arch backwards as far as you can go (without falling over)



While standing slide one hand as far down your right leg as you can, repeat on the left (keep your hips straight)



While standing, put your hands on your hips, hold them still and twist to the left and to the right



Lie on your back and slowly lift one leg (keeping it straight) while keeping the other flat on the ground. Repeat for the other leg.

PAGE FOR HEALTHCARE PROFESSIONALS ONLY

TENSION HEADACHE

RULE OUT THE PRESENCE OF RED FLAGS¹⁴

- Sudden onset of headache
- Patient aged ≥ 50 years
- Frequency/severity increases over weeks to months
- Papilloedema
- Headache is worse in certain positions (e.g., lying down) or cough headache (especially if prolonged)
- New onset of headache in a patient with HIV, cancer or is immunocompromised
- Signs of systemic illness such as fever, rash, neck flexion stiffness
- First ever headache with focal neurologic signs, confusion or drowsiness
- Onset after head trauma



If any red flags are present consider referral to a specialist

ASSESSING TENSION HEADACHE FOR MUSCLE SPASM



What to look for?^{15,16}

How is the:

- Posture - are they hunched over? Is their head sitting forward?
- Range of motion:
 - Poor neck rotation
 - Poor neck flexion and lateral neck flexion



What to feel for?¹⁷⁻¹⁹

Is there tenderness or spasm in:

- Muscles of the head, shoulders and neck
 - Assess tenderness with small rotating movements with the index and middle fingers and a firm pressure in the frontal, temporal, masseter, pterygoid, sternocleidomastoid, splenius and trapezius muscles
- Are there trigger points in the muscles of the head and neck (and surrounding areas)?**
- Areas where sustained pressure causes referred pain in nearby areas



What to ask about?^{15,17}

Do they have ≥ 2 of the following:

- Bilateral location
- Pressing or tightening (non-pulsating) quality
- Mild or moderate intensity
- Not aggravated by routine physical activity (e.g. walking or climbing stairs)

Do they have both:

- No nausea or vomiting
- No more than one of photophobia or phonophobia

How long do they last?

(30 min to seven days indicates tension headache)

No symptom better accounted for by another ICHD-3 diagnosis?

Other things to consider:

- Are they feeling stressed?
- Are they getting enough sleep?

If any of the above assessments indicate the presence of painful muscle spasm, consider whether a non-opioid, non-benzodiazepine skeletal muscle relaxant, such as NORGESIC, may be appropriate.¹

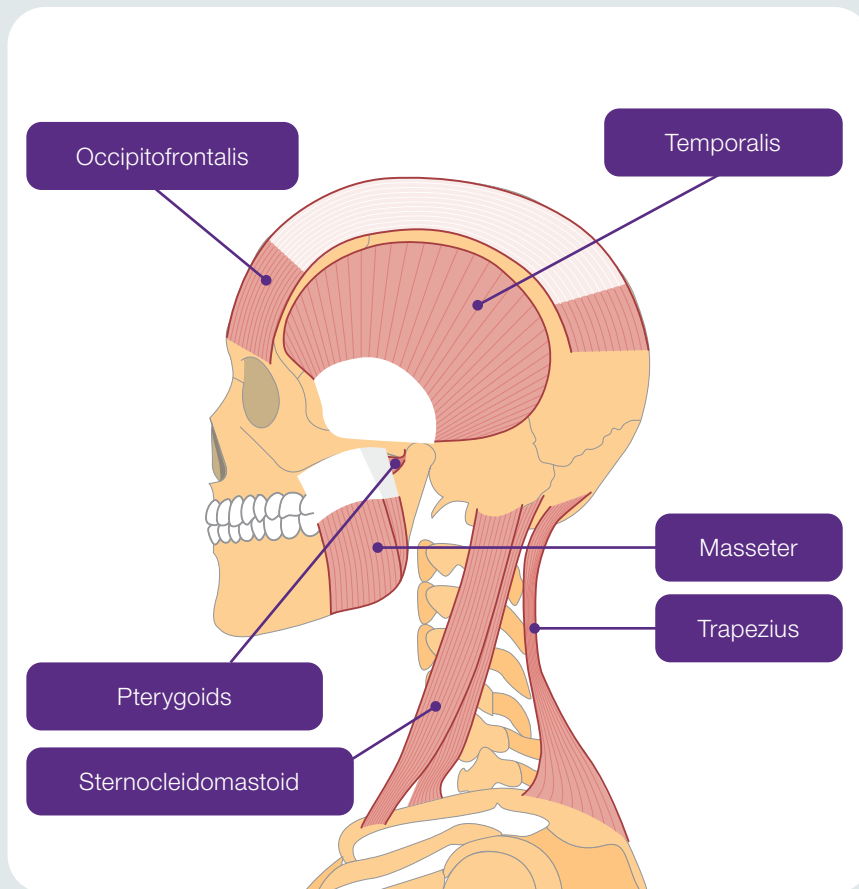
Scan the QR code to learn more, access clinical resources and explore patient case studies



TENSION HEADACHE

Muscles in the neck and shoulders

The muscles in and around your neck and shoulders that may contribute to tension headache include:^{15-17,20}



Assessing tension headache

Check for the presence of muscle spasm with the below exercises:⁸



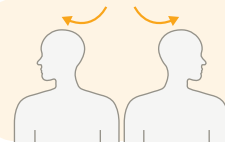
Putting your chin on your chest



Tipping your head back to look at the sky



Touching your right ear to your right shoulder (without moving your shoulder), repeat on left side



Looking over your right shoulder, then over your left shoulder (aim for 90 degrees)

Assess for trigger points by:¹⁷



Feeling the muscles of your head, neck and shoulder with small rotating movements with the index and middle fingers and a firm pressure



PBS Information: NORGESIC is not listed on the PBS.

PBS Information: NORFLEX is not listed on the PBS.



Please review the full Product Information before prescribing. Please scan the QR code to see full Product Information, also available on request from iNova Pharmaceuticals, Toll-free 1800 630 056.



Please review the full Product Information before prescribing. Please scan the QR code to see full Product Information, also available on request from iNova Pharmaceuticals, Toll-free 1800 630 056.

References: **1.** Norgesic Product Information. **2.** Norflex Product Information. **3.** Clofen Product Information. **4.** Dantrolene Product Information. **5.** Teichtahl AJ, McColl G. Aus Fam Phys. 2013;42(11):774–778. **6.** Isaac Z and Kelly HR. Evaluation of the adult patient with neck pain. UpToDate [Internet]. Literature review current through Feb 2024 (accessed April 2024). **7.** Simons SM and Dixon JB. Physical examination of the shoulder. UpToDate [Internet]. Literature review current through Feb 2024 (accessed April 2024). **8.** Wilson CH. The Musculoskeletal Examination. In- Walker HK, Hall WD, Hurst JW, editors. Clinical Methods- The History, Physical, and Laboratory Examinations. 3rd ed. Boston- Butterworths; 1990. Chapter 164. **9.** Jung B, Black AC, Bhutta BS. Anatomy, Head and Neck, Neck Movements. [Updated 2023 Nov 9]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK557555/> (accessed April 2024). **10.** Ourieff J, Scheckel B, Agarwal A. Anatomy, Back, Trapezius. [Updated 2023 Mar 11]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK518994/> (accessed April 2023). **11.** Therapeutic Guidelines. Low back pain. eTG June 2023 edition (accessed April 2024). **12.** Wheeler SG, et al. Evaluation of low back pain in adults UpToDate [Internet]. Literature review current through Feb 2024 (accessed April 2024). **13.** Sassack B, Carrier JD. Anatomy, Back, Lumbar Spine. [Updated 2023 Aug 14]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK557616/> (accessed April 2024). **14.** Therapeutic Guidelines. Headache and facial pain classification and diagnosis. eTG June 2023 edition. Accessed April 2024. **15.** Shah N, Hameed S. Muscle Contraction Tension Headache. 2023 Jul 16. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. PMID: 32965945. **16.** Abboud J, et al. Cephalalgia 2013;33(16):1319–36. **17.** Headache Classification Committee of the International Headache Society (IHS) The International Classification of Headache Disorders, 3rd edition. Cephalalgia 2018;38(1):1–211. **18.** Do TP, et al. J Headache Pain 2018;19(1):84. **19.** Chowdhury C, Ann Indian Acad Neurol 2012;15(Suppl 1):S83–8. **20.** Lee E, et al. J Am Osteopath Assoc 2019;119(10):e40–e41.