

Mr Jaykar Panchmatia



Mr Panchmatia is a highly motivated and organised Consultant Orthopaedic Spine Surgeon at Guy's and St. Thomas' Hospitals, London.

He has degrees from Harvard University, where he was a Fulbright Scholar, and Cambridge University. His practice spans all spinal conditions. He is a specialist in serious/ complex high value injuries.

Registered with APIL, AvMA, National Crime Agency (NCA) and the UK Register of Expert Witnesses, Mr Panchmatia was awarded Best Spinal Surgery Expert Witness in Acquisition UK's 2024 Expert Witness Awards.



Med-Leg Matters: Spine Stability & Cauda Equina Syndrome

Mr. Jaykar Panchmatia

MA (Cantab) MPH (Harv) MB BChir (Cantab) FRCS
Consultant Spine Surgeon
Guy's & St. Thomas' Hospitals



Clinical and Academic Experience

Cambridge University

- MA
- MB BChir

Harvard University

- Masters in Public Health
- Fulbright Scholar

Johns Hopkins Hospital

Spine surgery fellow

Guy's & St. Thomas' NHS Trust

- Consultant spine surgeon since 2015
- Trauma and orthopaedic lead for clinical governance
- Trauma and orthopaedic lead for mortalities





Question 1

In which three cases would referral to a spine surgeon or MRI scan likely be necessary?

- A. Minor muscle strain improving with rest and therapy.
- B. Worsening neurological symptoms (e.g., leg weakness, loss of bladder control).
- C. History of cancer with new, persistent back pain and weight loss.
- D. Back pain unresponsive to treatment, progressively worsening.
- E. Non-mechanical back pain with no structural issues.





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Spine Stability





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Question 2

Which of the following conditions can cause spine instability?

- A. Infections
- B. Tumours
- C. Fractures
- D. Soft tissue injuries
- E. All the above
- F. C & D only





Answer 2

Which of the following conditions can cause spine instability?

- A. Infections
- B. Tumours
- C. Fractures
- D. Soft tissue injuries
- E. All the above
- F. C & D only





Why is spinal stability crucial in medicolegal cases?

Personal Injuries

- Cervical facet joint dislocations
- Coccyx fractures
- Lumbar disc disease
- Osteoporotic fractures
- Pars fractures
- Spinal cord injuries
- Unstable thoracolumbar fractures
- Whiplash





Why is spinal stability crucial in medicolegal cases?

Clinical Negligence

- Central cord syndrome
- Diagnosis of multiple myeloma
- Diagnosis of spinal infections
- Diagnosis of spinal metastases
- Management of spinal deformities
- Management of unstable cervical and thoracolumbar trauma



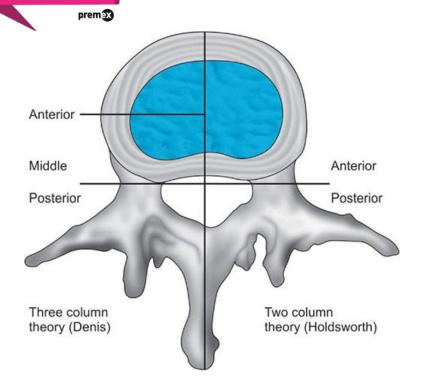


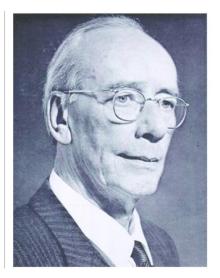
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Spinal stability definition: legacy









Spinal stability definition

Clinical stability of the spine is "the ability of the spine under physiological loads to limit patterns of displacement so as not to:

- damage or irritate the spinal cord or nerve roots
- cause incapacitating deformity
- result in pain due to structural changes".
- Panjabi and White



Spinal instability: translation

An unstable spine is one that cannot limit movement during day-to-day activities.

This results in:

- neurological injury
- incapacitating deformity
- pain due to structural changes.





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How to identify spinal instability: classification systems



SINS Component	Score
Location	
Junctional (occiput-C2, C7-T1,	3
T11-L1, L5-S1)	
Mobile Spine (C3-6, L2-4)	2
Semirigid (t3-T10)	1
Rigid (s2-5)	0
Pain	
Yes	3
Occasional pain but not mechanical	2
Pain-free lesion	0
Bone Lesion	
Lytio	2
Mixed (lytic/blastic)	1
Blastic	0
Spinal alignment	
Subluxation/translation present	4
De novo deformity (kyphosis/sooliosis)	2
Normal alignment	0
Vertebral Body collapse	
>50% collapse	3
< 50% collapse	2
No collapse with >50% body involved	1
None of the above	0
Posterolateral involvement of	
the spinal elements	
Bilateral	3
Unilateral	1
None of the above	0

1 Fracture Morphology	Score
None	0
Compression	1
Burst	2
Distraction	3
Rotation/Translation	4
2 Disco-Ligamentous Complex	
None	0
Indeterminate	2
Disrupted	3
Neurologic Function	
Intact	0
Root injury	1
Complete cord injury	2
Incomplete cord injury	3
Ongoing compression with defic	its +1
Total*	

^{*}Total score ≤ 3, nonoperative treatment is recommended; score = 4, either surgery or nonoperative treatment is indicated; and scores ≥ 5, surgery is recommended.

TLICS 3 independent predictors					
1	Morphology immediate stability	- Compression - Burst - Translation/rotation - Distraction	1 2 3 4	- Radiographs - CT	
2	Integrity of PLC longterm stability	- Intact - Suspected - Injured	0 2 3	- MRI	
3	Neurological status	- Intact - Nerve root - Complete cord - Incomplete cord - Cauda equina	0 2 2 3 3	- Physical examination	
Predicts		· Need for surgery	0-3 4 >4	nonsurgicalsurgeon's choicesurgical	



Question 3

Which statement accurately reflects the management of vertebral compression fractures in elderly patients?

- A. They are often asymptomatic and need investigation only if neurological deficits are present.
- B. A history of fractures increases the risk of future ones, warranting assessment for osteoporosis and fall risk.
- C. Surgical intervention should be used in all cases, avoiding conservative treatments.
- D. They are self-limiting with no long-term impact on function or quality of life
- E. They are most commonly caused by metastatic disease and require immediate oncological investigation.





Answer 3

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Key: how to identify spinal instability

An unstable spine is one that cannot limit movement during day-to-day activities.

This results in:

- neurological injury
- incapacitating deformity
- pain due to structural changes.





How to identify spinal instability: patient history

- Risk factors for instability including trauma, cancer, and infection
- Symptoms of nerve root or cord compression
- Mechanical back pain
- Loss of height or change in posture



How to identify spinal instability: patient examination

- Mechanical back pain or pain on palpation
- Deformity
- Neurological deficit





How to identify spinal instability: investigations

- Focal bony abnormalities
- Soft tissue structures
- Neurological compression
- Global spinal alignment





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Catastrophic outcomes of spinal instability

A catastrophic injury is a severe injury causing permanent disability, lasting medical conditions, or major physical and cognitive impairments.

Such injuries typically have a profound effect on the individual's quality of life and their family's wellbeing.





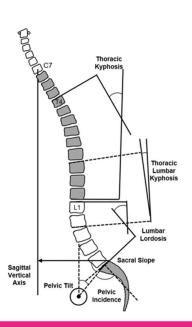
Catastrophic outcomes of spinal instability: neurological injury







Catastrophic outcomes of spinal instability: incapacitating deformity



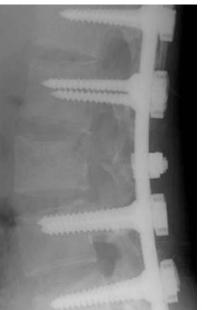






Catastrophic outcomes of spinal instability: pain due to structural changes





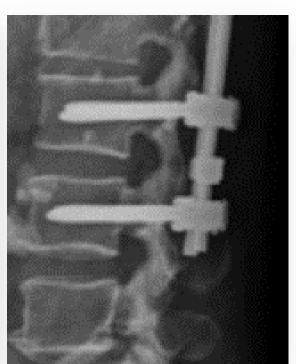




Catastrophic outcomes of spinal instability: pain due to structural changes









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Spinal instability top 10

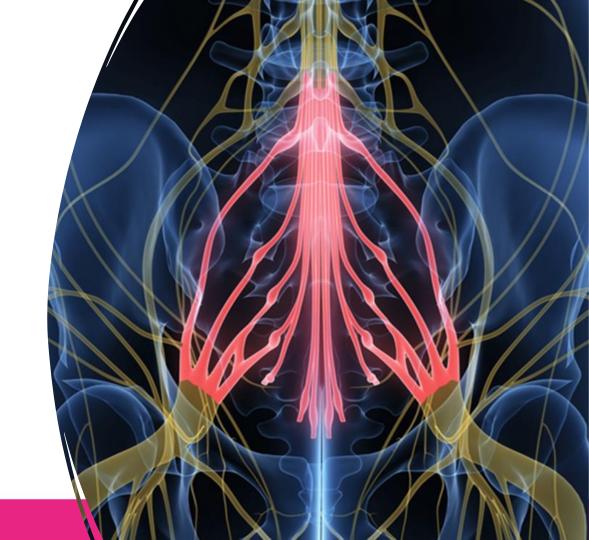
- 1. Are there any risk factors for instability, beyond just trauma?
- 2. Have you noticed pain, weakness, or numbness in your arms or legs?
- 3. Has your gait changed, or are you finding it harder to do up buttons?
- 4. Have you lost height? (Check past medical records to confirm.)
- 5. Has your posture changed?

Spinal instability top 10

- 6. Do you experience back pain when walking or standing?
- 7. Does your pain improve when lying flat?
- 8. How long after your symptoms started was spinal instability diagnosed?
- 9. Did your symptoms improve with treatment?
- 10. Do you now have pain above or below the area of instability?



Cauda Equina Syndrome





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Question 4

Which of the following is false about red flags in spine conditions?

- A. Severe back pain after trauma in older adults may indicate fractures.
- B. Progressive neurological deficits may suggest a serious condition.
- C. Pain relieved by walking is typical of mechanical back pain.
- D. Weight loss, fever, or night sweats may suggest infection or cancer.
- E. Loss of bowel or bladder control may indicate cauda equina syndrome.





Question 4

Which of the following is false about red flags in spine conditions?

- A. Severe back pain after trauma in older adults may indicate fractures.
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Cauda equina syndrome: definition

Cauda equina syndrome (CES) is a serious clinical diagnosis, typically resulting from compression of the nerve roots at the lower end of the spine.

Key symptoms include:

- Bladder and/or bowel dysfunction
- Reduced sensation in the saddle area
- Sexual dysfunction
- Additional symptoms may include back pain, leg pain, and motor or sensory changes in the lower limbs, though these are not essential for diagnosis.

MRI scanning is usually required to confirm nerve root compression, the most common cause of CES.





Question 5

Which statement is false according to the SBNS and BASS Standards for Cauda Equina Syndrome?

- A. Low threshold for MRI investigation, available 24/7 at the referring hospital.
- B. MRI decision does not require discussion with local spinal services.
- C. MRI should be done urgently at the local hospital before consulting spinal services.
- D. Routine cases should be prioritised over CES MRI, with delays documented.
- E. If MRI is contraindicated, consult local spinal services.





Answer 5

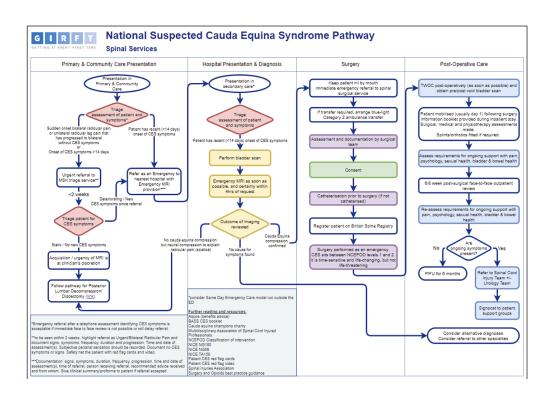
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Answer 5: GIRFT Pathway





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Classification of Cauda Equina Syndrome

Comprehensive classification of cauda equina syndrome

Name	Abbreviation	Definition
Suspected CES	CESS	No bladder/bowel/genital/perineal symptoms, but bilateral sciatica or motor/sensory loss in legs. (this is clinical CESS)
		Or known large disc herniation on existing MRI (this is radiological CESS)
Symptom-only CES (early CES)	CESE	Normal bladder, bowel and sexual function but some sensory loss in perineum or change in micturition frequency
Incomplete CES	CESI	Alteration in bladder/urethral sensation or function, but maintenance of executive bladder control. + $/$ – perineal sensory changes, or sexual or bowel sensory or functional changes
CES with retention	CESR	As in 3 but with painless bladder retention and overflow
Complete CES	CESC	$In sensate \ bladder \ with \ overflow \ in continence, \ no \ per ineal \ per ianal \ or \ sexual \ sensation, \ no \ anal \ tone$



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Cauda Equina Syndrome top 10

- 1. Bilateral leg pain / motor loss / sensory loss?
- 2. Previous MRI scan?
- 3. Change in urinary function
 - frequency
 - altered bladder function
 - painless urinary retention
 - overflow incontinence

Cauda Equina Syndrome top 10

- 4. Perineal sensation
 - altered sensation or partial sensory loss
 - complete sensory loss
- 5. Sexual changes
- 6. Altered bowel sensation or incontinence
- 7. Document timeline

Cauda Equina Syndrome top 10

- 8. Examination: power in lower extremity myotomes and presence / absence of lower limb reflexes.
- 9. Digital rectal examination: assess anal wink, light touch, pin prick, resting tone, and active tone.
- 10. Post void bladder scan. MRI scan.



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Post-void bladder scan

- **Post-void residual (PVR) volume:** Measures urine left in the bladder after urination.
 - Normal ranges: Young adults: PVR <50 ml.
 - Normal ranges: Older adults: PVR 50–100 ml.
 - High PVR: Indicates incomplete emptying but not always due to neurogenic bladder dysfunction.

PVR and CES likelihood

- PVR >200 ml: Suggests increased risk of CES and may warrant MRI in suspected cases.
- PVR <200 ml: Does not exclude CES; CES+ can occur with lower PVRs. Physical signs are critical for diagnosis.

CES types and outcomes

• CES with neurogenic retention (CESR): Often seen with very high PVR (>1,000 ml).



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Thank you

We welcome your questions:

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Contact

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Mr Panchmatia is a highly motivated and organised Consultant Orthopaedic Spine Surgeon at Guy's and St. Thomas' Hospitals, London. He trained at Level 1 UK trauma centres as an orthopaedic surgeon and a neurosurgeon. Mr Panchmatia completed his fellowship at Johns Hopkins Hospital, USA. He has degrees from Harvard University, where he was a Fulbright Scholar, and Cambridge University. He has 70+ academic publications and presentations, and has excellent written and verbal communication skills.

Clinical Practice & Experience

Mr Panchmatia studied Medicine at Cambridge University. This included a clinical attachment at Yale University, USA. He furthered his education as a Fulbright Scholar at Harvard University, USA and was a visiting scholar at the Barrow Neurological Institute. Mr Panchmatia was subsequently awarded a Trauma & Orthopaedic Spine Fellowship at the Johns Hopkins Hospital, USA.

In 2015, Mr Panchmatia was appointed as Consultant Trauma & Orthopaedic Surgeon at Guy's and St. Thomas' Hospitals, London (GSTT) specialising in spinal surgery. He is the Clinical Governance Lead for trauma and orthopaedic surgery at GSTT, and the lead for mortalities.

Medico Legal Practice

Mr Panchmatia is an established expert witness and has a mature medico-legal practice. His medico legal practice spans all spinal conditions. He is a specialist in serious/complex high value injuries.

Mr Panchmatia has undergone his expert witness training (Bond Solon). He is registered with APIL, AvMA, National Crime Agency (NCA) and the UK Register of Expert Witnesses. Mr Panchmatia was awarded Best Spinal Surgery Expert Witness in Acquisition UK's 2024 Expert Witness Awards.

Mr Panchmatia welcomes personal injury and clinical negligence claims, for claimant, defendant and joint cases. Mr Panchmatia welcomes both civil and criminal instructions. He offers nationwide clinics, and home and prison visits.

Mr Panchmatia has clinical expertise in all spinal conditions including:

- Whiplash associated disorders including neck and arm pain
- Cauda equina syndrome
- Spinal trauma, including osteoporotic fractures
- Spinal fractures
- Spinal cord injury including paralysis
- Failed back surgery
- Foot drop
- Neck and back pain
- Spinal tumours (cancer)
- Spinal infections.



Publications

Spinal Trauma

- Eseonu K, Panchmatia J, Pang D, Fakouri B. A Review of the Clinical Utility of Therapeutic Facet Joint Injections in Whiplash Associated Cervical Spinal Pain. Spina Pain. Spina Surg Relat Res. 2021 Dec 14;6(3):189-196.
- Goldring M, Tamvokopoulos G, Gibson AJ, Panchmatia JR. Vertebral artery injuries and cervical spine injury: is there a high enough index of suspicion? Eur Spine J. 2013;22.
- Malik K, Eseonu KC, Pang D, Fakouri B, Panchmatia JR. Is Preexisting Cervical Degeneration a Risk Factor for Poor Prognosis in Whiplash-Associated Disorder? Int J Spine Surg. 2021 Aug;15(4):710-717.
- Panchmatia JR, Kebaish KM. A novel surgical technique to treat sacral fractures. Ann R Coll Surg Engl. 2014 Nov;96(8):626.
- Sacks GD, Panchmatia JR, Marino M, Hill C, Rogers SO Jr. The effect of operative timing on functional outcome after isolated spinal trauma. J Trauma. 2011 Dec;71(6):1668-72.
- Shafafy R. Suresh S. Afolavan JO. Vaccaro AR. Panchmatia JR. Blunt vertebral vascular injury in trauma patients: ATLS® recommendations and review of current evidence. J Spine Surg. 2017 Jun;3(2):217-225.

Spinal Surgery

- Eseonu KC, Payne K, Ward S, Fakouri B, Panchmatia JR. Chronic Low Back Pain Occurring in Association With Hypermobility Spectrum Disorder and Ehlers-Danlos Syndrome. Int J Spine Surg. 2021 Jun;15(3):449-457.
- Milczynska WM, Ahmad A, Ahmed AI, Panchmatia JR, Fakouri B, Liantis P, Panteliadis P. Does titanium cage subsidence affect clinical outcomes in ACDF surgery? A tertiary centre experience. Ann R Coll Surg Engl. 2023 Apr;105(4):378-383.
- Panchmatia JR, Bhagawati D, Mitrasinovic S, Molloy S. A novel technique to reduce the likelihood of proximal junctional failure. Ann R Coll Surg Engl. 2017 Sep;99(7):585-586.
- Panchmatia JR, Vaccaro AR, Wang W, Harris JA, Bucklen BS. Lumbar Percutaneous Pedicle Screw Breach Rates: A Comparison of Robotic Navigation Platform Versus Conventional Techniques. Clin Spine Surg. 2020 May;33(4).
- Panchmatia JR, Verma R. The role of stem cells in spinal surgery. Journal of Clinical Orthopaedics and Trauma. 2010;1:13-15.
- Panchmatia JR, Visenio MR, Panch T. The role of artificial intelligence in orthopaedic surgery. Br J Hosp Med (Lond). 2018 Dec 2;79(12):676-681.
- Srirangarajan T, Eseonu K, Fakouri B, Liantis P, Panteliadis P, Lucas J, Ember T, Harris M, Tyrrell M, Sandford B, Panchmatia JR. Retrospective analysis of medium-term outcomes following anterior lumbar interbody fusion surgery performed in a tertiary spinal surgical centre. Ann R Coll Surg Engl. 2024 Jul;106(6):540-546.
- Uschold T, Panchmatia J, Fusco DJ, Abla AA, Porter RW, Theodore N. Subaxial cervical juxtafacet cysts: single institution surgical experience and literature review. Acta Neurochir (Wien). 2013 Feb;155(2):299-308.
- . Wong F, Panchmatia JR, Lenke L. Technical steps to improve lumbar lordosis restoration in transforaminal lumbar interbody fusion (TLIF) surgery. Hong Kong J Orthop Res. 2022;5(1):9-10.



Publications

Spinal Deformity

- Afolayan JO, Shafafy R, Maher M, Moon KH, Panchmatia JR. Assessment and management of adult spinal deformities. Br J Hosp Med (Lond). 2018 Feb 2;79(2):79-85.
- Molloy S, Butler J, Yu H, Selvadurai S, Panchmatia JR. The advantages of performing anterior column reconstruction prior to pedicle subtraction osteotomy in staged revision adult deformity surgery. Bone Joint Journal. 2014;96B(S15):27.
- Panchmatia JR, Casey ATH. Scoliosis and its associated neural axis abnormalities- A 5 year review. JBJS. 2010;92-B:379.
- Panchmatia JR, Isaac A, Muthukumar T, Gibson AJ, Lehovsky J. The 10 key steps for radiographic analysis of adolescent idiopathic scoliosis. Clin Radiol. 2015 Mar;70(3):235-42.

Surgical Safety

- Panchmatia JR, Hemenway D. Surgical complications: car crashes and the credit crunch. ANZ J Surg. 2010 Sep;80(9):581-3.
- Wong JM, Panchmatia JR, Ziewacz JE, Bader AM, Dunn IF, Laws ER, Gawande AA. Patterns in neurosurgical adverse events: intracranial neoplasm surgery. Neurosurg Focus. 2012 Nov;33(5).
- Wong JM, Ziewacz JE, Ho AL, Panchmatia JR, Bader AM, Garton HJ, Laws ER, Gawande AA. Patterns in neurosurgical adverse events: cerebrospinal fluid shunt surgery. Neurosurg Focus. 2012 Nov;33(5).
- Wong JM, Ziewacz JE, Ho AL, Panchmatia JR, Kim AH, Bader AM, Thompson BG, Du R, Gawande AA. Patterns in neurosurgical adverse events: open cerebrovascular neurosurgery. Neurosurg Focus. 2012 Nov;33(5).
- Wong JM, Ziewacz JE, Panchmatia JR, Bader AM, Pandey AS, Thompson BG, Frerichs K, Gawande AA. Patterns in neurosurgical adverse events: endovascular neurosurgery. Neurosurg Focus. 2012 Nov;33(5).



Publications

Spinal Infections

Panchmatia JR, Lenke LG, Molloy S, Cheung KM, Kebaish KM. Review article: Surgical approaches for correction of post-tubercular kyphosis. J Orthop Surg (Hong Kong). 2015 Dec;23(3):391-4.

Spinal Tumours

- Arvin B, Panchmatia JR, Casey AT. Cervical C2 osteoma, unusual presentation and transoral approach for complete excision. Spine J. 2009 Mar;9(3).
- Eseonu KC, Panchmatia JR, Streetly MJ, Grauer JN, Fakouri B. The role of Vertebral Augmentation Procedures in the management of vertebral compression fractures secondary to multiple myeloma. Hematol Oncol. 2023 Aug;41(3):323-334.
- Panchmatia JR, Harris M. Orthopaedic trainee knowledge of the guidelines for the treatment of malignant spinal cord compression. The Spine Journal. 2016;S91.

Cauda Equina Syndrome

- Panchmatia JR. Referring a patient with suspected cauda equina syndrome. Letter: BMJ.com. 2007.
- Williams JT, Lister H, Fakouri B, Panchmatia JR. The National Suspected Cauda Equina Syndrome Pathway: implications for physiotherapists. Physiotherapy. 2024 Mar;122:68-69.
- Williams MJT, Poon DH, Pumphrey DJ, Kathirgamakarthigeyan DN, Fakouri MB, **Panchmatia JR**. Cauda equina syndrome: Recognising 'red flags' for back pain in primary care. InnovAiT. 2023;16(11):536-539.

Books

• Vaccaro, A. R., Panchmatia, J., Kaye, D., & Prasad, S. K. (2019). Navigation and robotics in spine surgery. Hardcover. 4 November.