

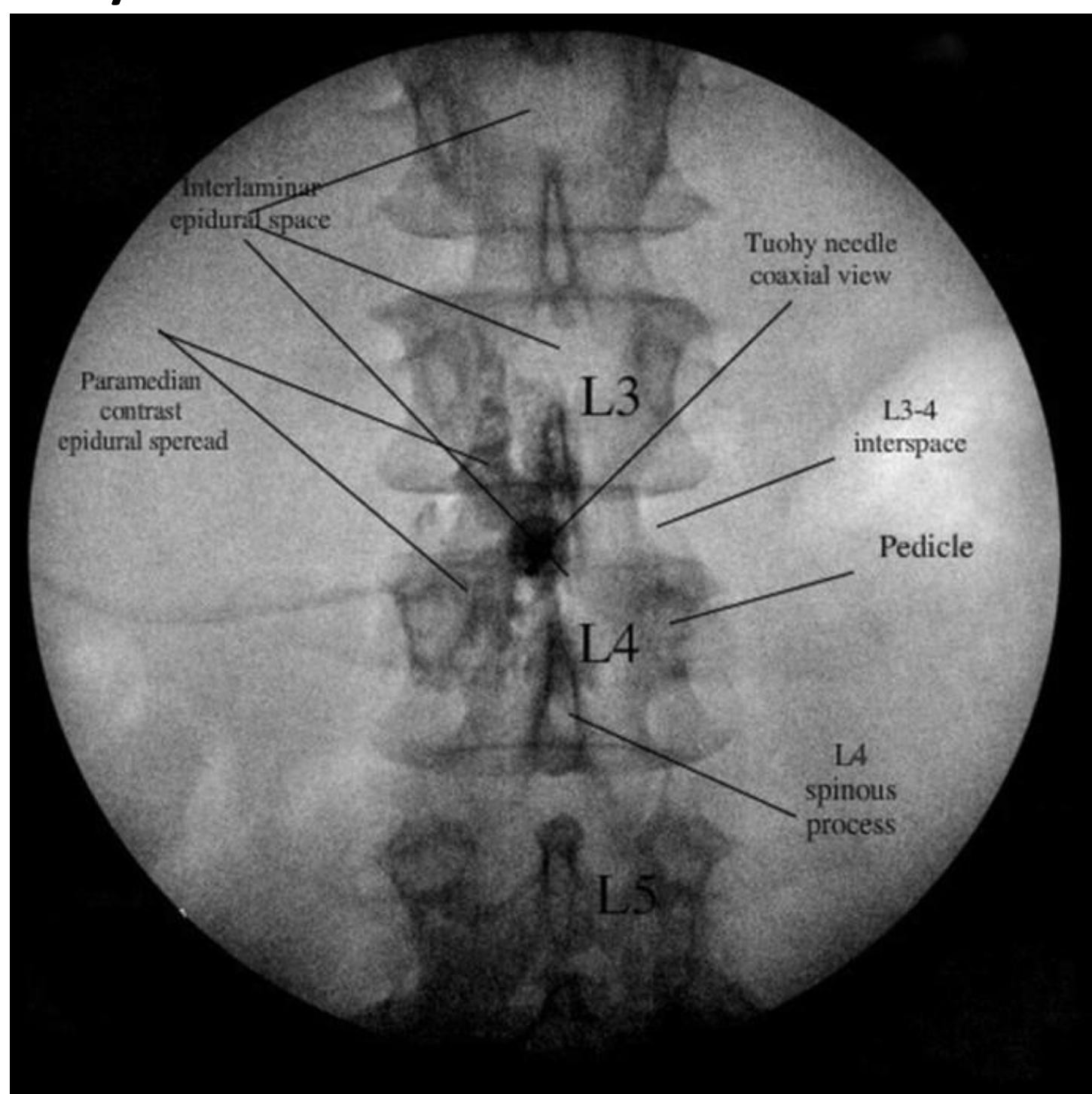
Distinguishing Contracture From Spasticity in Hemiplegic Stroke: An Interdisciplinary Approach.

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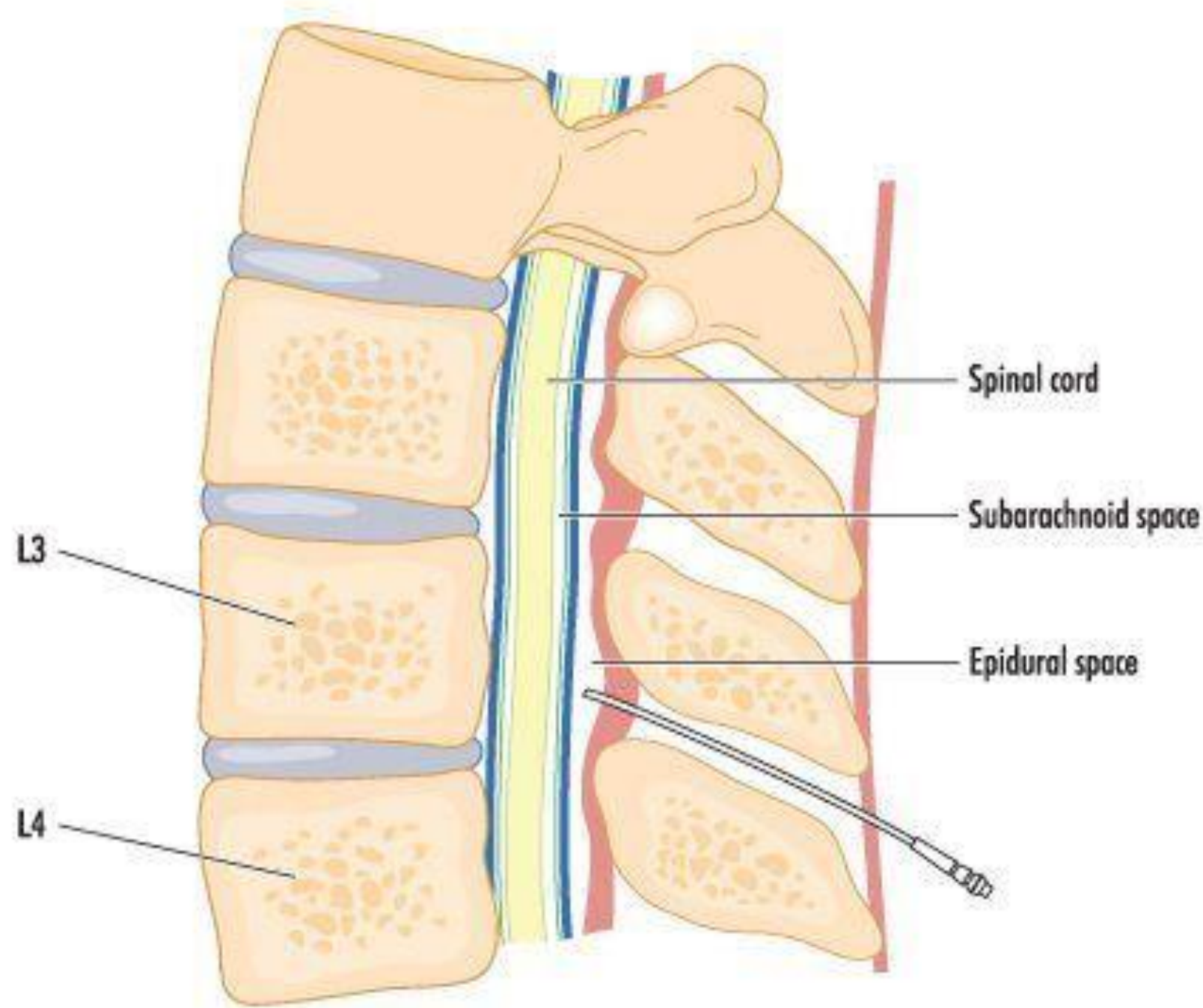
Case Presentation

Our patient is a 78-year-old male who suffered a left MCA stroke in 2017 that left him with severe right sided spastic hemiplegia. His ADLs and community integration were significantly compromised due to his extensor posturing in his paretic lower extremity. It became a cause of frequent falls out of his power chair and total dependence for all transfers. After an interdisciplinary discussion with the medical team and patient, it was decided to trial an epidural motor block with local anesthetic accompanied by immediate pre & post procedural physical exams by our Physical Medicine and Rehabilitation colleagues.



(4)

Our patient underwent an interlaminar epidural motor blockade with 14cc's of lidocaine at the L2/L3 level. The patient's pre-procedural physical exam was concerning for lower extremity contractures, but following the motor blockade, his exam displayed significant improvement in his range of motion and MAS. He was able to be safely positioned in his power wheelchair and maintain that positioning without a seatbelt.



(7)

Brief Literature Review

Spasticity can be a debilitating sequelae of neurological disorders and pose a threat to patient safety when their activities of daily living (ADLs) are compromised. Contractures are an end result of severe or untreated spasticity, and can pose even more of a challenge[2]. Epidural motor blockade can be a useful diagnostic tool to help differentiate between spasticity and musculotendinous contracture when the clinical examination is inconclusive.[1] This becomes important clinically as detection of muscle contracture can lead to the indication for neuro-orthopedic surgery[3] whereas spasticity can be managed by less invasive interventions. This case demonstrated an interdisciplinary approach to patient care involving Interventional Pain as well as Physical Medicine and Rehabilitation physicians.

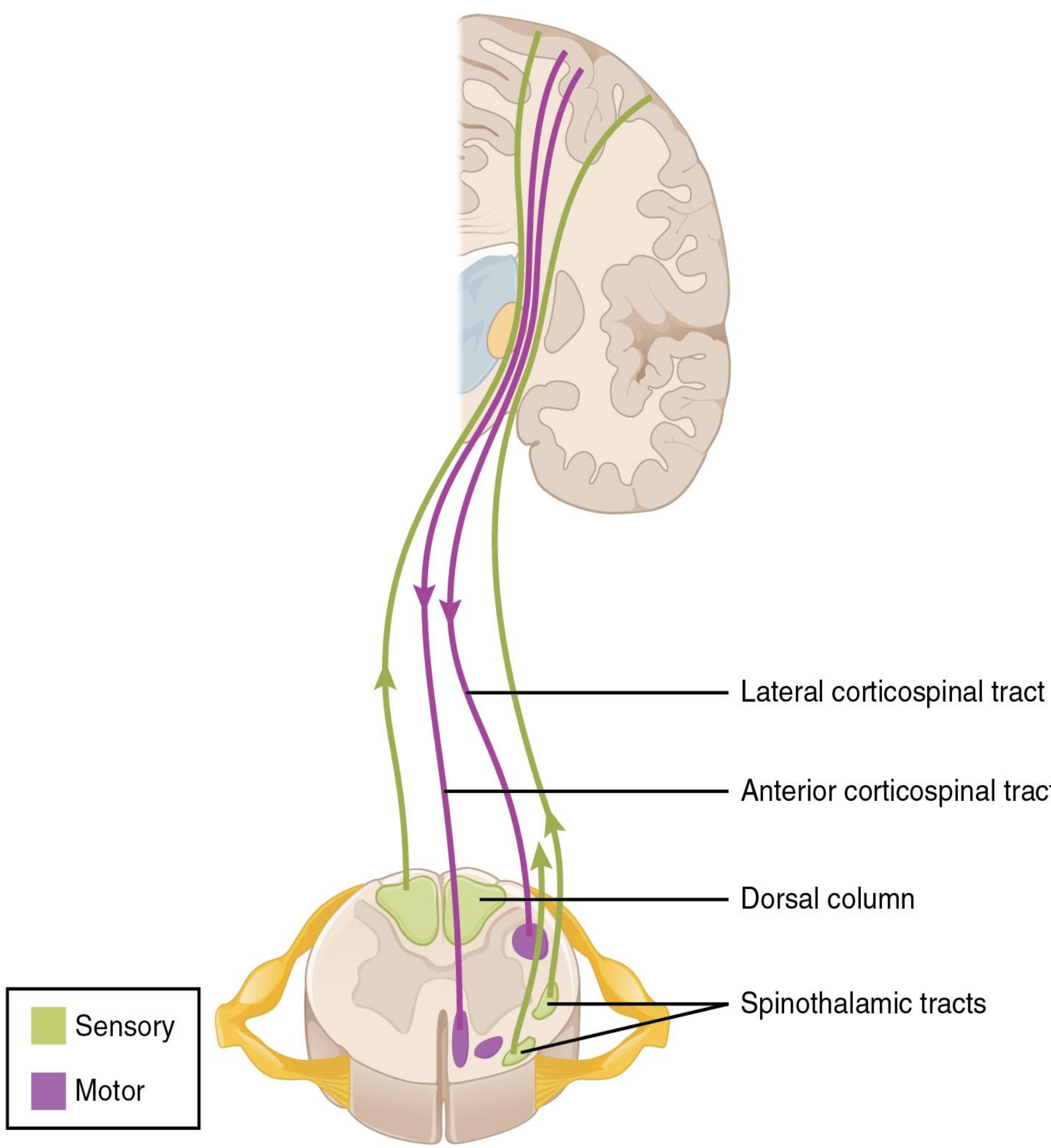
Table 1: The Ashworth Scale (Ashworth 1964)

Grade	Description
0	No increase in tone
1	Slight increase in tone giving a catch when the limb is moved in flexion or extension
2	More marked increase in tone but limb easily flexed
3	Considerable increase in tone – passive movement is difficult
4	Limb rigid in flexion or extension

(6)

Discussion

Overall, our case report is unique in that the motor blockade was able to be a useful clinical tool in determining if this patient had a contracture that would require tendon lengthening surgery, or if he had spasticity and would better benefit from less invasive measures, such as Botox or baclofen pump implantation.



(5)

References

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