

# OMT as Treatment Modality for EDS

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## Introduction

Ehlers-Danlos Syndrome (EDS) is a collection of genetic disorders affecting connective tissue through abnormal collagen formation.

Key features of all variations of the syndrome include hypermobile joints and hyperextensible skin. There are 13 different recognized types of EDS, with the most common being hypermobile (type III). Patients with joint hypermobility frequently complain of chronic somatic symptoms including diffuse or localized joint and muscle pain. [1]

## Background

Primary treatment of hypermobile EDS is multimodal. Approaches frequently involve a combination of pharmacologic, cognitive behavioral and physical therapy [1]. Most physical therapies center on improving proprioception, muscle strength and joint stability [2].

Very few studies assess the use of osteopathic manipulative therapy (OMT) in patients with EDS. Common practice considers musculoskeletal instability a relative contraindication to more direct, high-energy techniques. However, a 2023 case report described patient benefit obtained through a combination of several OMT techniques, including the use of HVLA [3].

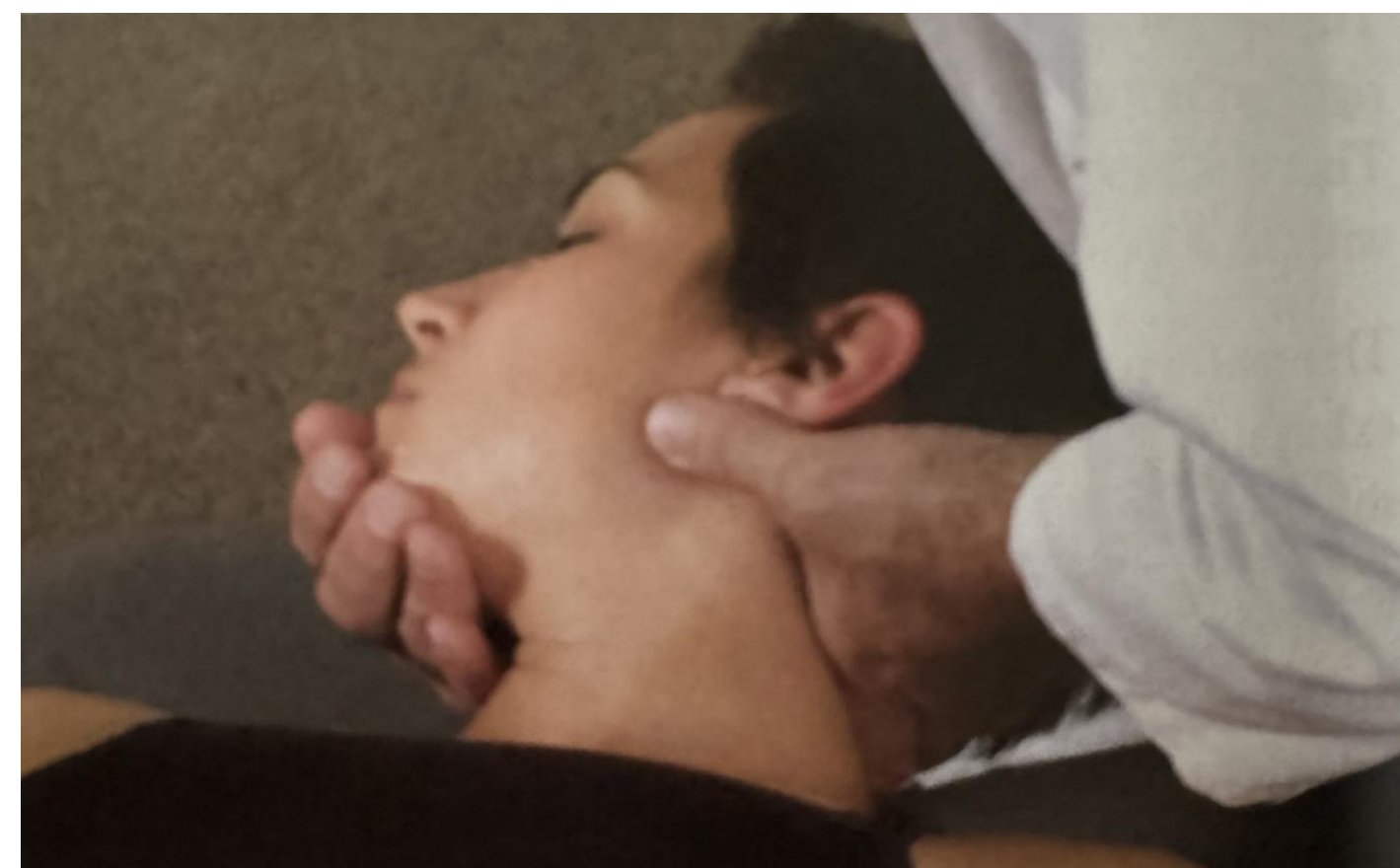
## Patient Presentation

Patient is a 31-year-old female with a history of EDS (hypermobility/type III) who was referred to the residency OMT clinic by her PCP. The patient reported ongoing pain of lumbar, thoracic, and cervical spine of many years' duration. She reported being diagnosed with EDS type III in her early 20s. She experienced a fall around the same time, which exacerbated her chronic pain.

Prior to presentation she had tried multiple other treatment modalities including acupuncture, massage, and functional medicine. She also trialed a variety of pain medication, without adequate relief. She reported suffering from lymphatic congestion, and her initial goal was to improve lymphatic flow.

Her initial osteopathic structural examination showed somatic dysfunction of the thoracic outlet, diaphragm, and generalized hypertonicity throughout the paraspinal musculature.

Subsequent exam revealed cervical somatic dysfunction of C5 which was side-bent left and rotated left.

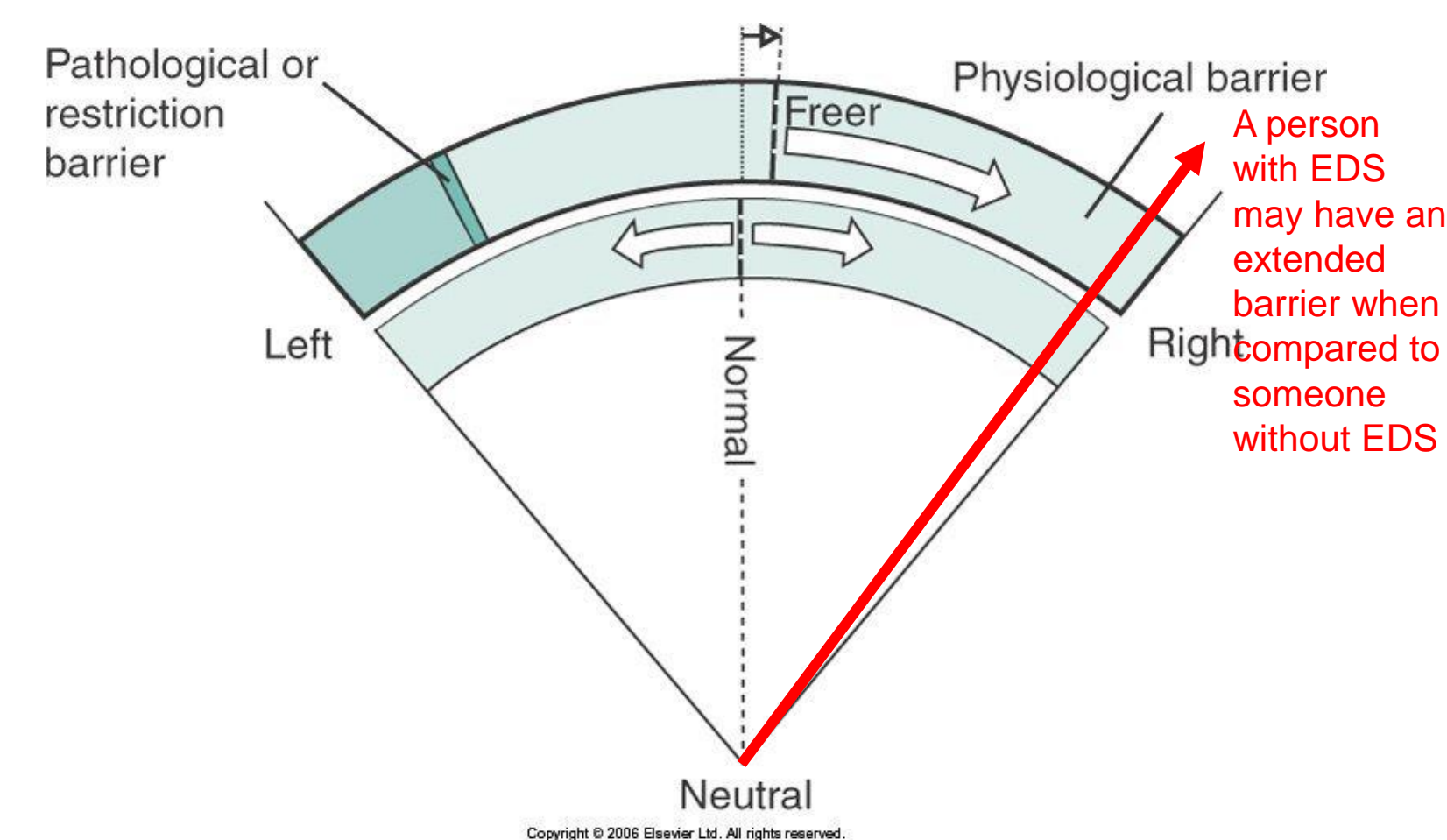


## Treatment

Given her concerns with lymphatic congestion, initial treatments were directed at relieving restrictive barriers and mobilizing lymphatic flow; these treatments included suboccipital release, myofascial release of the thoracic and lumbar paraspinals, doming of the diaphragm, and pedal pump.

Although these passive, indirect techniques did provide patient with some relief of symptoms, she still reported continued pain, especially of her cervical dysfunction, prompting reconsideration of her treatment plan.

As a result of discussions with the patient, additional techniques including cervical HVLA were added. In performing this technique, careful attention was placed on identifying the patient's pathologic and physiological barrier which were beyond those of a patient without EDS.



## Outcomes

After utilizing HVLA for the first time, the patient had noticeable improvement in TART changes and subjective feeling of improvement of lymphatic congestion. She was scheduled for a 2 week follow up, at which time she reported excellent, sustained response to treatment and desire for additional treatments including more direct techniques to address spinal somatic dysfunctions.

## Discussion

Due to her history of EDS, frequent, frank conversations were required between the patient, the resident physicians involved in her care, and the attending osteopathic physician overseeing her treatment. She continues to be successfully treated with OMT including lymphatic, indirect, and direct techniques, including myofascial release, muscle energy, counter strain, and HVLA. This has minimized her need for additional pain medications and other alternative treatment modalities.

A future area of study could be to monitor patients in which direct techniques were utilized to determine if there any long-term effects of these techniques. There is currently no data on how patients with EDS, who already have lax joints, respond to direct manipulation.

## Conclusion

In conclusion, as result of successful utilization of HVLA in this young adult female with EDS type III, we propose that direct techniques have a role in treatment of conditions like EDS, where traditionally techniques like HVLA have been said to be relatively contraindicated. This should include frequent, honest conversations with the patient and physicians involved in their care that include discussion of risks, benefits, and rationale behind chosen techniques.

## References

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