

Effect of comprehensive physical therapy on a 25-year-old pregnant female with Ehlers Danlos Syndrome: A case report

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BACKGROUND/PURPOSE:

Ehlers Danlos Syndrome is an autosomal dominant connective tissue disorder with widespread sequelae that affects multiple organ systems. Patients with EDS have a variety of clinical presentations including generalized joint hypermobility, musculoskeletal pathologies, chronic widespread pain, altered skin texture, myofascial abnormalities, cardiovascular pathologies, and gastrointestinal disorders. Increased mobility of the pelvic joints during pregnancy has been well established with relaxin levels increasing tenfold. Females with Ehlers Danlos Syndrome are at greater risk for pelvic instability, pre-term delivery, and other complications secondary to connective tissue dysfunction. A paucity of research exists regarding the effects of an SI stabilization program in conjunction with manual therapy and proprioceptive retraining in pregnant patients with EDS-hypermobility type.

The purpose of this case report is to examine the benefits of multifaceted physical therapy interventions in a pregnant adult female with EDS.

CASE DESCRIPTION:

- 25 year old Pregnant female who is 4 weeks pregnant at evaluation, and 9 weeks pregnant at discharge.
- Military wife who was concerned about moving with her husband.
- Prior Therapy at 16 years old to learn how to manage her Ehlers Danlos Syndrome.
- Had Maximal Difficulty with Bed Mobility, Moderate difficulty with Sit to stand, and Moderate Difficulty with gait with directional changes.
- Unable to work as a yoga teacher.

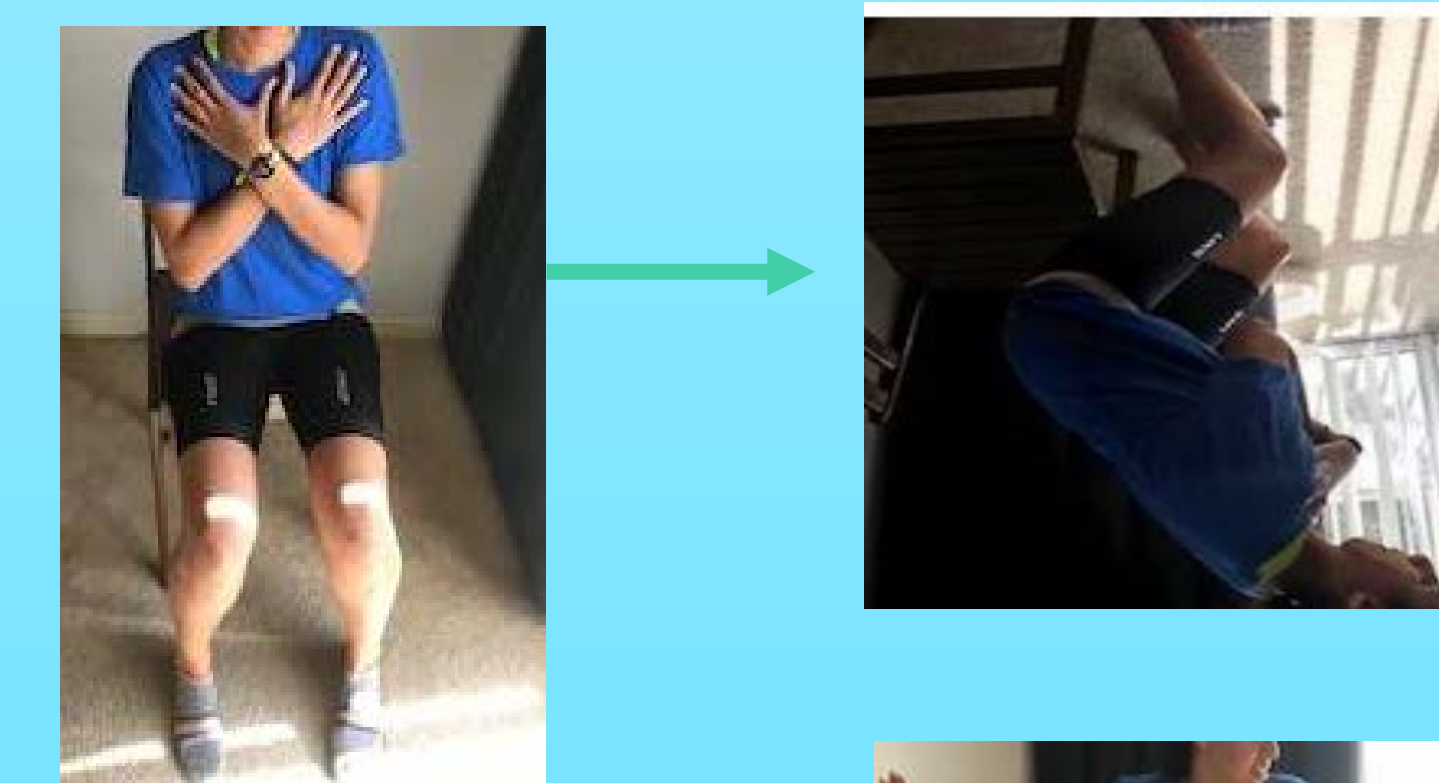
INTERVENTIONS:

2x a week for 5 weeks progressive sacroiliac joint stabilization, proprioceptive re-training, lower extremity strengthening, and sacroiliac joint compression belt application.

Sacroiliac joint Stabilization:



Lower Extremity Strengthening:



Proprioceptive Retraining:



RESULTS:

Impairments	Initial Evaluation	Final Evaluation
Visual Analog Scale	rest: 5/10 best 3/10 worst: 10/10 evaluation: 6/10	rest: 3.5/10 best 1/10 worst: 7/10 evaluation: 3/10
Palpation	Tender to palpation over the lateral gluteal region at the gluteus medius/minimus muscle belly, piriformis, and sacral sulcus.	Tender to palpation over the sacral sulcus.
Special Test	Positive Sacroiliac distraction, compression, thigh thrust.	Positive Sacroiliac distraction, compression, thigh thrust.
Lower Extremity Functional Scale	26/80= 32.5% of maximal function.	39/80= 48.75% of maximal function.

CONCLUSION:

- The patient required moderate assistance with bed mobility, minimal assistance with sit to stand, and minimal assistance with ambulation and change of direction.
- She improved her lower extremity functional scale (LEFS) 13 points to a 39/80.
- She was able to walk for more than 20 minutes, stand to cook for 50 minutes, and sleep 8 hours through the night.
- She was able to return to work as a yoga teacher for 20 hours per week.
- Despite these functional improvements the patient remained to have concerns about her long-term orthopedic health and ability to take care of her future child.

CLINICAL APPLICATION:

Sacroiliac joint stabilization in conjunction with lumbo-pelvic stabilization, proprioceptive re-training, and manual therapy were effective and improve functional outcomes in a pregnant female with EDS.

REFERENCES

