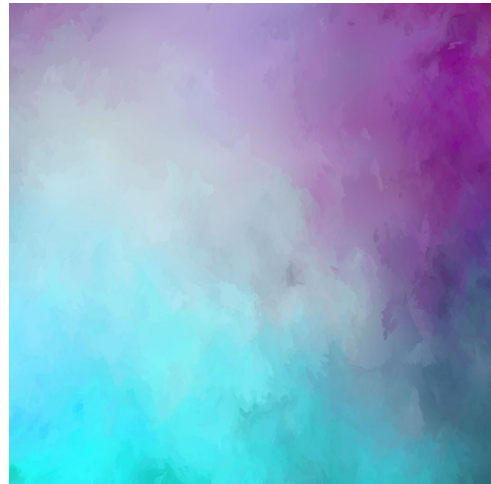


# AUTONOMIC DYSREGULATION IN ATHLETES

KATRINA LESHER, MD

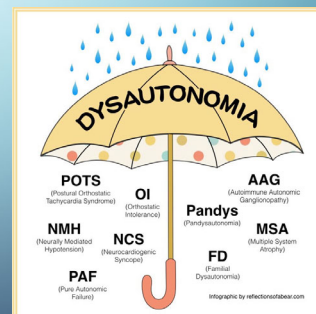
ROSE SCHIRLE, DPT

JUNE 13, 2024



## OVERVIEW OF AUTONOMIC DYSREGULATION

- Constellation of symptoms not able to be explained by other conditions
- Often have seen multiple specialists
- Can become “overmedicalized”
- Impacts function



## KEY FEATURES

Often present during adolescence

Increased symptoms relating to puberty

Viral illness/ Long COVID

Female

Family history of similar symptoms












Home schooled

Gymnast, Dancer, Swimmer

## CLINICAL PRESENTATION

- Variable
- Pain
- Dizziness
- Chronic fatigue

### DYSAUTONOMIA CAN IMPACT THE WHOLE BODY

<b>BRAIN</b> fatigue brain fog migraines vertigo fainting lightheadedness		<b>HEART</b> tachycardia bradycardia palpitations chest pain		<b>STOMACH</b> bloating nausea vomiting pain	
<b>MOUTH</b> dry mouth tooth decay difficulty swallowing		<b>BLOOD VESSELS</b> hypotension hypertension poor perfusion		<b>INTESTINES</b> impaired motility constipation diarrhea pain	
<b>EYES</b> dryness sluggish pupils sensitivity to light greyed out vision		<b>IMMUNE CELLS</b> increased allergies inflammation		<b>GALLBLADDER</b> reduced motility inflammation pain	
<b>SKIN</b> dryness reduced sweating increased sweating		<b>BLADDER</b> frequent urination retention nocturia pain			

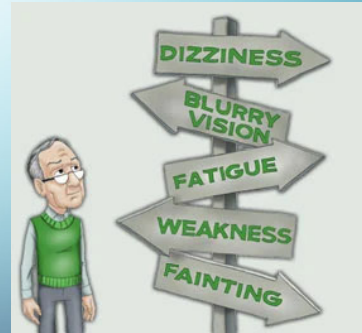
...and MUCH more!

[WWW.DYSAUTONOMIAINTERNATIONAL.ORG](http://WWW.DYSAUTONOMIAINTERNATIONAL.ORG)



## DIZZINESS/LIGHTHEADEDNESS

- Orthostatic intolerance
- Neurocardiogenic pre-syncope
- Feeling faint
- Decreased hearing
- Tunnel vision
- Not always 'POTS'



## HYPERMOBILITY AND JOINT PAIN

- Majority of our patients have some degree of joint hypermobility
- May be diffuse and severe with some instability (RARE)
- Areas of tightness due to accommodating/anchoring for stability
- 50% have significant joint and MSK pain reports

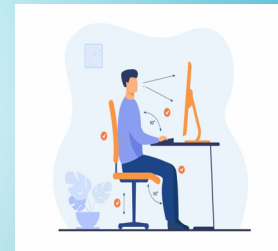


## PM&R APPROACH



- Therapeutic interventions
- Rare use of medications
- Emphasizing importance of mental health for coping strategies for stress and anxiety

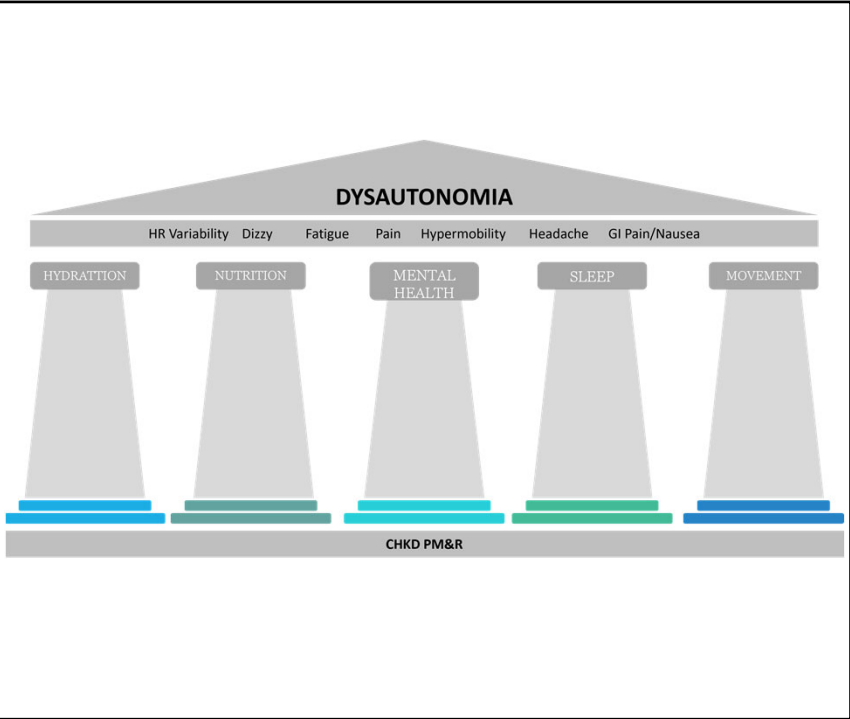
## PT GOALS



- Muscle strengthening to stabilize hypermobile joints
- Pain modalities
- Build confidence with movement patterns (decrease inhibition)
- Return to movement
- Ongoing education on biomechanics/ergonomics
- Reassurance

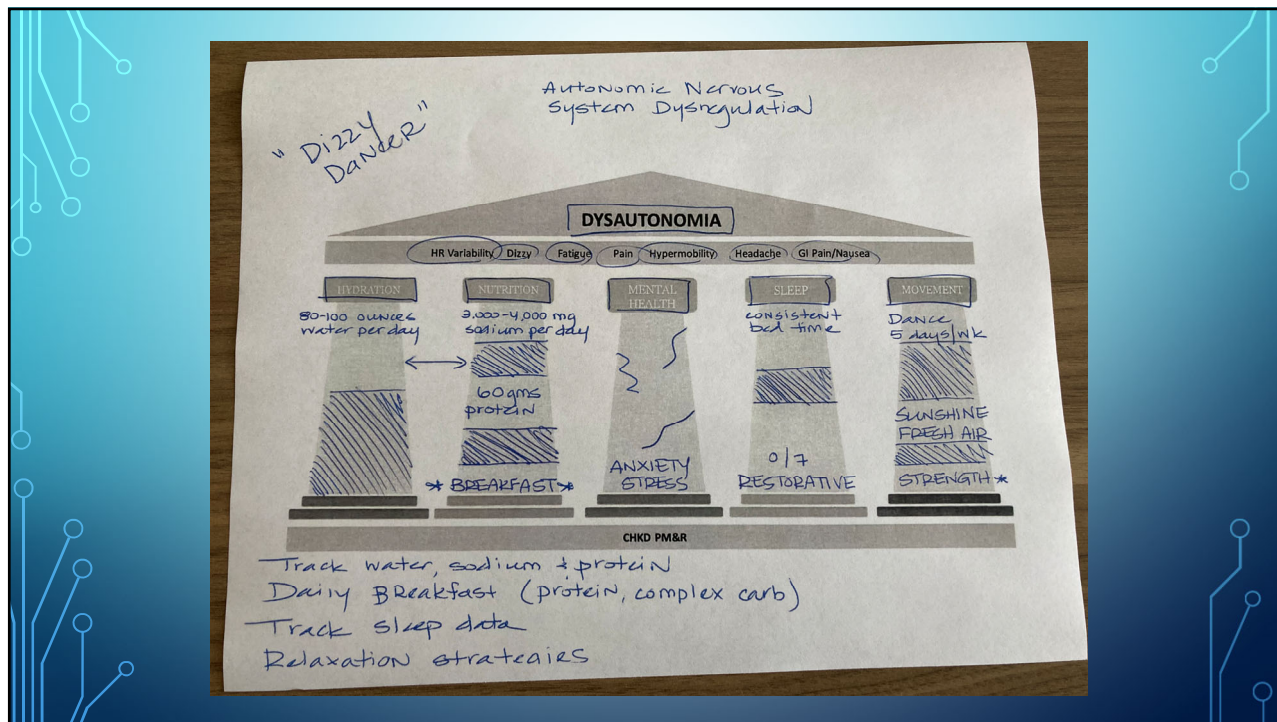
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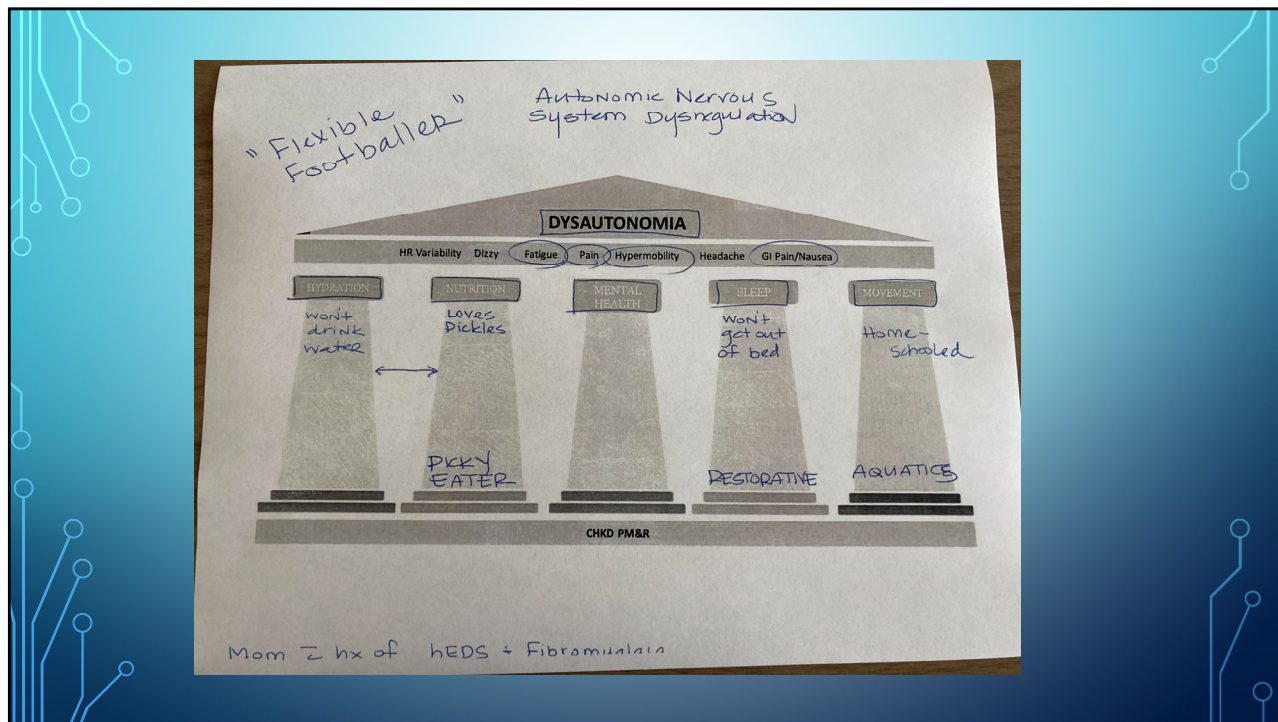
**CASE 1**

- 14 year old female dancer
  - Elevated heart rate
  - Presyncope



## CASE 2

- 6 year old male
  - Dad concerned he can not keep up with his peers at soccer
  - "runs funny"



## WITHOUT TREATMENT

- Poor quality of life
- Frequent ED/Urgent care visits
- Doctor shopping

## CHKD PM&R TEAM

- Dr. Leshner
- Dr. Dillard
- Dr. Dasher
- 7 locations across Hampton Roads
- 757 668-9915

