

# SMÄRTA OCH KOMORBIDITET VID EDS/HSD



# EDS/HSD

## EDS/HSD specifika symptom

- Led/muskel **smärta**
- Luxation/subluxation
- Blödning
- Skörhet i:
  - Inre organ
  - Hjärta/kärl
  - Ögon
  - Tänder
  - Muskler/senor/bäckenbotten

## Samsjuklighet (komorbiditet)

- **Dysautonomi (POTS,OI)**
- IBS
- Migrän
- **MCAS**
- Ångest/depression
- Trötthet
- **Dysparuni**
- Lokalbedövning

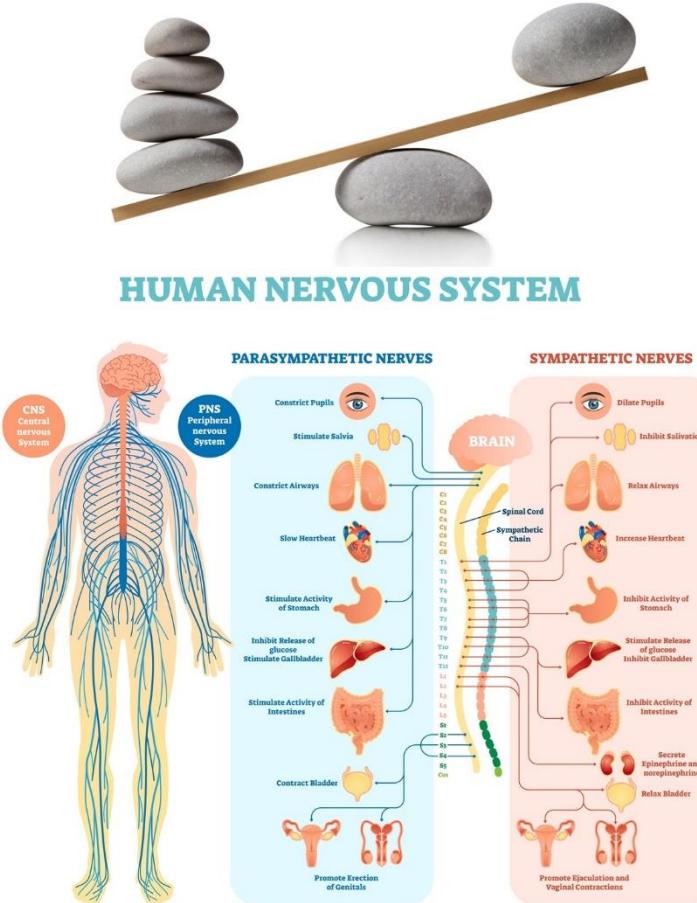


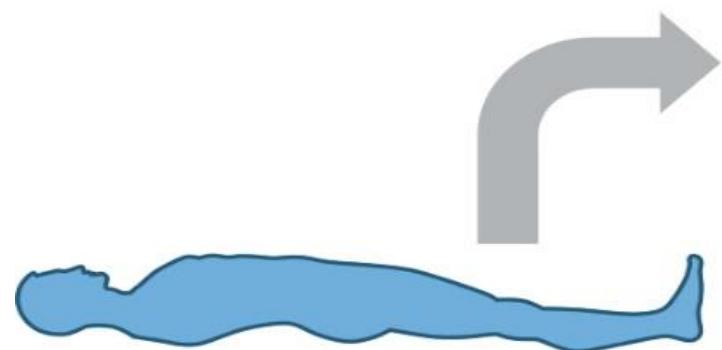
# Smärta vid EDS/HSD

- **Nociceptiv**
  - Ledsmärta
  - Muskelsmärta
  - Inflammation
- **Neuropatisk**
  - Nervinklämning
  - Nervskada
- **Nociplastisk**
- **Kontinuerlig**



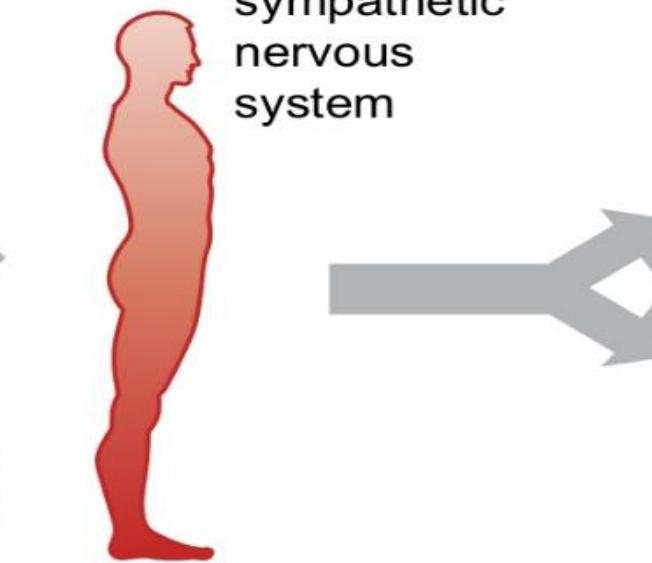
# Dysautonomi





Supine

- Blood volume distributed throughout the body

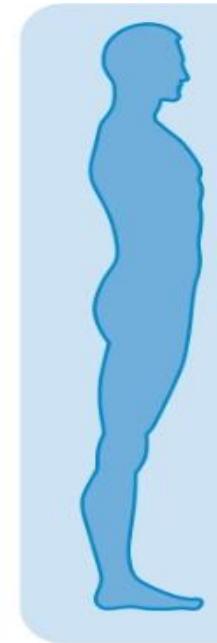


Move to upright

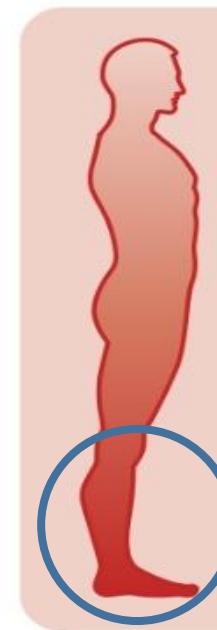
- Shift of  $\geq 500$  mL of blood to lower body

Autonomic nervous system response

- Baroreceptor reflex activation of the sympathetic nervous system



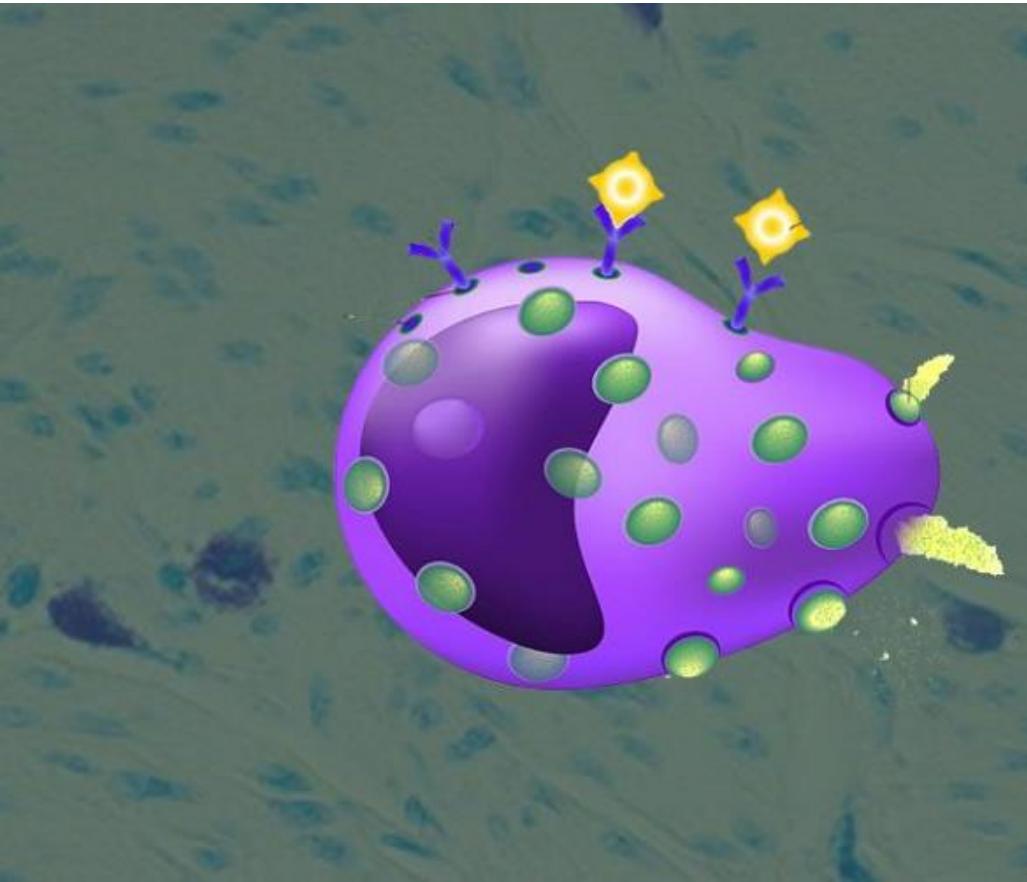
Normal responses



Dysautonomia



# Mastcellsaktiv



## Some common SYMPTOMS of MAST CELL DISEASE that are caused by mast cell mediator release



### NEUROLOGICAL

headache, brain fog, cognitive dysfunction, anxiety, depression

Patients may have a few or many symptoms

### CUTANEOUS (SKIN)

flushing of the face/neck/chest  
hives, skin rashes  
itching with or without rash

### CARDIOVASCULAR

light-headedness  
syncope (fainting)  
rapid heart rate, chest pain  
low blood pressure  
high blood pressure at the start of a reaction  
blood pressure instability

### GASTROINTESTINAL

diarrhea, nausea, vomiting, abdominal pain, bloating, gastroesophageal reflux disease (GERD)

### SKELETAL

bone/muscle pain, osteopenia, osteoporosis



Symptoms can be  
**SUDDEN** and  
**UNPREDICTABLE**  
in onset

AND MORE...

LEARN MORE AT

[tmsforacure.org](http://tmsforacure.org)



### GYNECOLOGICAL

uterine cramps  
bleeding



### URINARY

bladder irritability  
frequent voiding

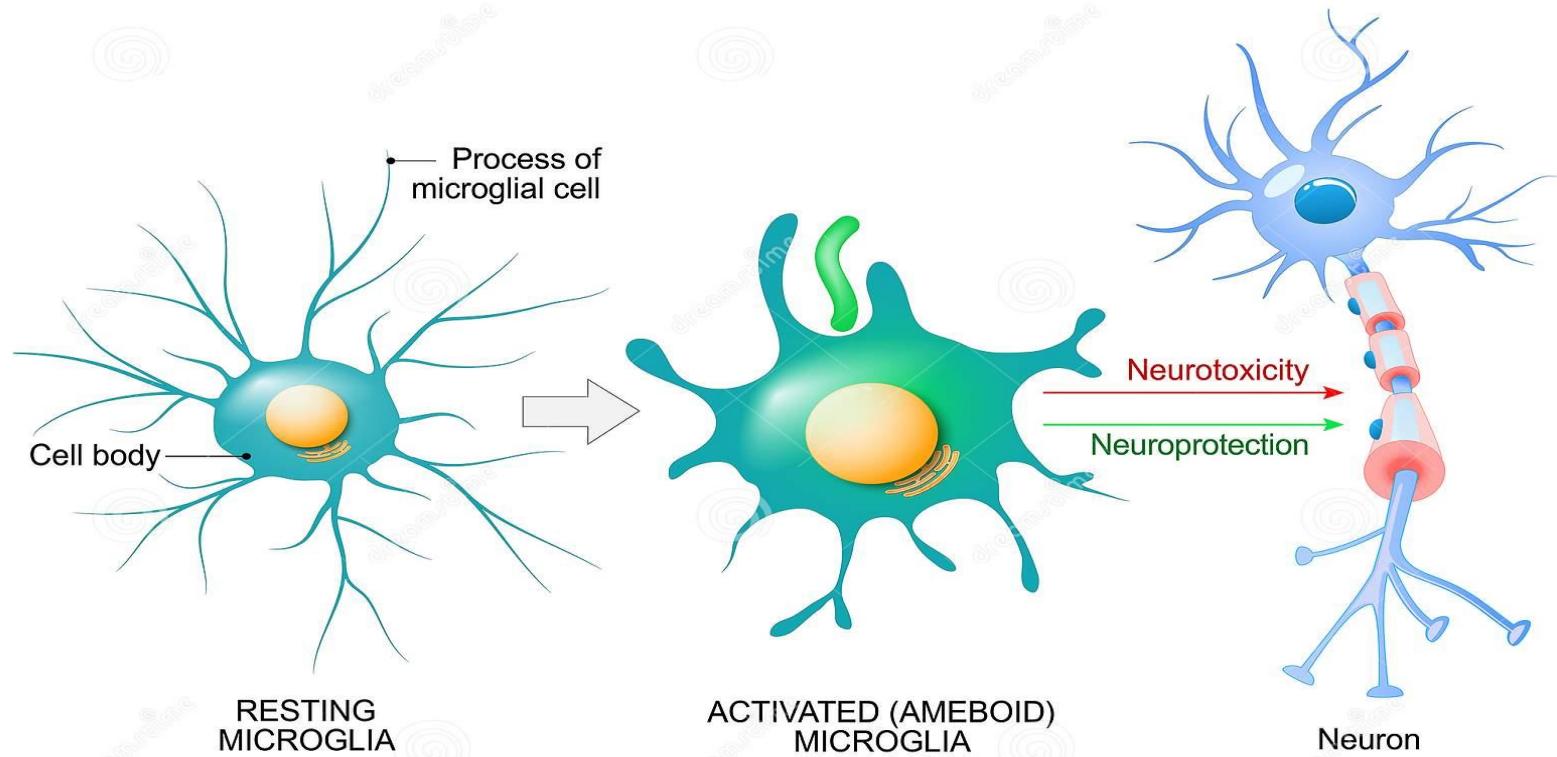
### SYSTEMIC AND/OR ORGAN SPECIFIC

### anaphylaxis

angioedema (swelling)



# MICROGLIA



# Dysparuni

- Skörhet
- Led/muskel relaterad
- Bäckenbotten patologi/skada
- Psykisk trauma
- Endometrios
- Dysautonomi
- MCAS?



# Behandling

- Egenvård
- Läkemedelsbehandling
- Rehabilitering



# Behandling av smärta vid EDS/HSD

- **Nociceptiv**
  - Ledsmärta
  - Muskelsmärta
  - Inflammation
- **Neuropatisk**
  - Nervinklämning
  - Nervskada
- **Nociplastisk**
- **Kontinuerlig**

Proprioceptiv  
Egenvård  
Fysioterapi  
Arbetsterapi  
Psykolog  
Kurator  
Kirurgi

- NSAID, COX-2 hämmare
- Paracetamol
- TCA
- Duloxetin
- Gabapentin
- Pregabalin
- Blockader, "BTX"
- Capsaicin



# Behandling av dysautonomi

- plasmavolymökning
- Puls och blodtrycks-stabilisering
- Betablockad
- Ivabradin
- ”Syrgas”
- Konsultera specialist i kardiologi eller neurologi



# Behandling vid mastcellsaktiveringssyndrom

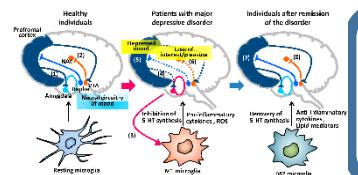
- Antihistaminer
- H<sub>2</sub>, H<sub>3</sub>-receptor blockad
- Mastcellstabilisering
- Kortikosteroider
- Konsultera specialist i immunologi



# Behandling vid dysparuni

- Fysioterapi
- Antidepressiva
- Blockader
- Behandling av dysautonomi, MCAS, endometrios
- Konsultation av gynekolog, psykolog

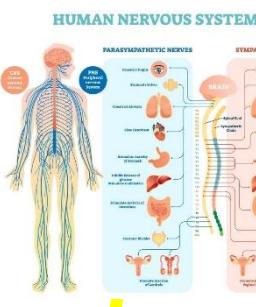




**Stress, smärta, sjukdom**

↑ utsöndring av Noradrenalin och neuropeptid Y

↓ utsöndring av Noradrenalin/Adrenalin



↑ sympathikus aktivitet

↑ Vaskulär resistens

Ortostatisk takykardi

Vatten, salt, stödstrumpor, anpassad aktivitet, andningen

Rodnad

Kläda

↑ Histamin

H1, H2, H3, H4-blockad

Blodkärl vidgning  
Lågt blodtryck





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