

# DISCLAIMER

All materials provided are for information only and do not necessarily reflect the views or positions of Riverside County Medical Association (RCMA) nor do they necessarily represent or create a standard of care with respect to the practice of medicine. If you have questions, please direct those questions to the original source and authors of those materials who did the research and writing.

# Muscle Cramps

By: Jerry Hizon, MD

# HX: Muscle Cramps

## True Cramps

- Ordinary (Nocturnal)
- Heat induced (Volume depletion, hyponatremia)
- Hemodialysis (Volume and Electrolyte shifts)
- Lower motor neuron disease
- Drug induced (Nifedipine, Beta agonists, tamoxifen, etc.)
- Selenium and chromium excess

## Dystonia

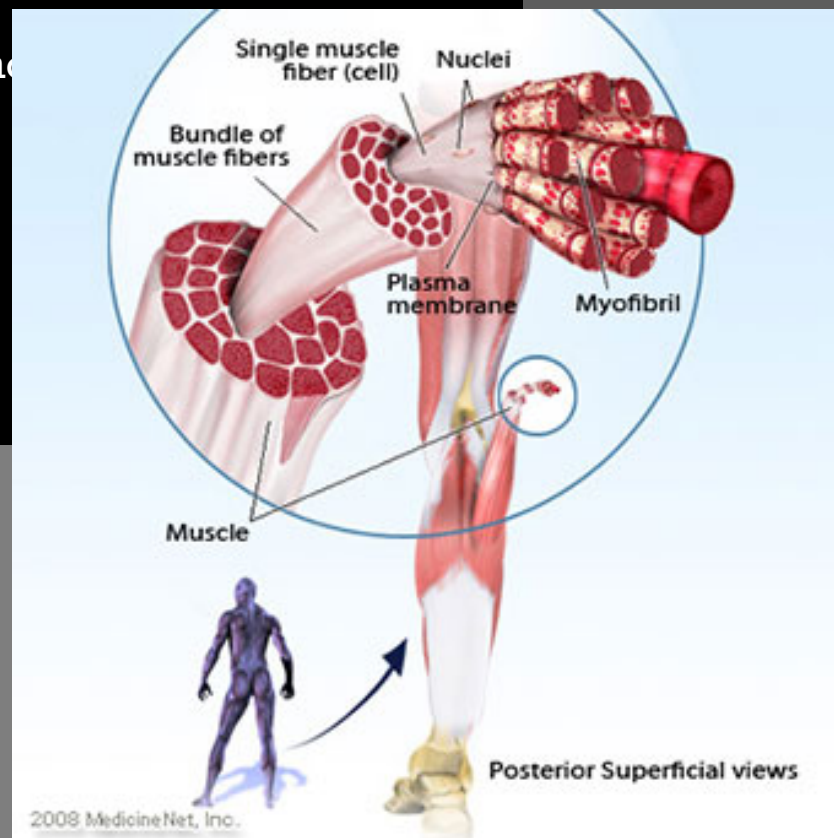
- Occupational (Writer's cramp)

## Tetany

## Contracture

## Cramp-like Symptoms

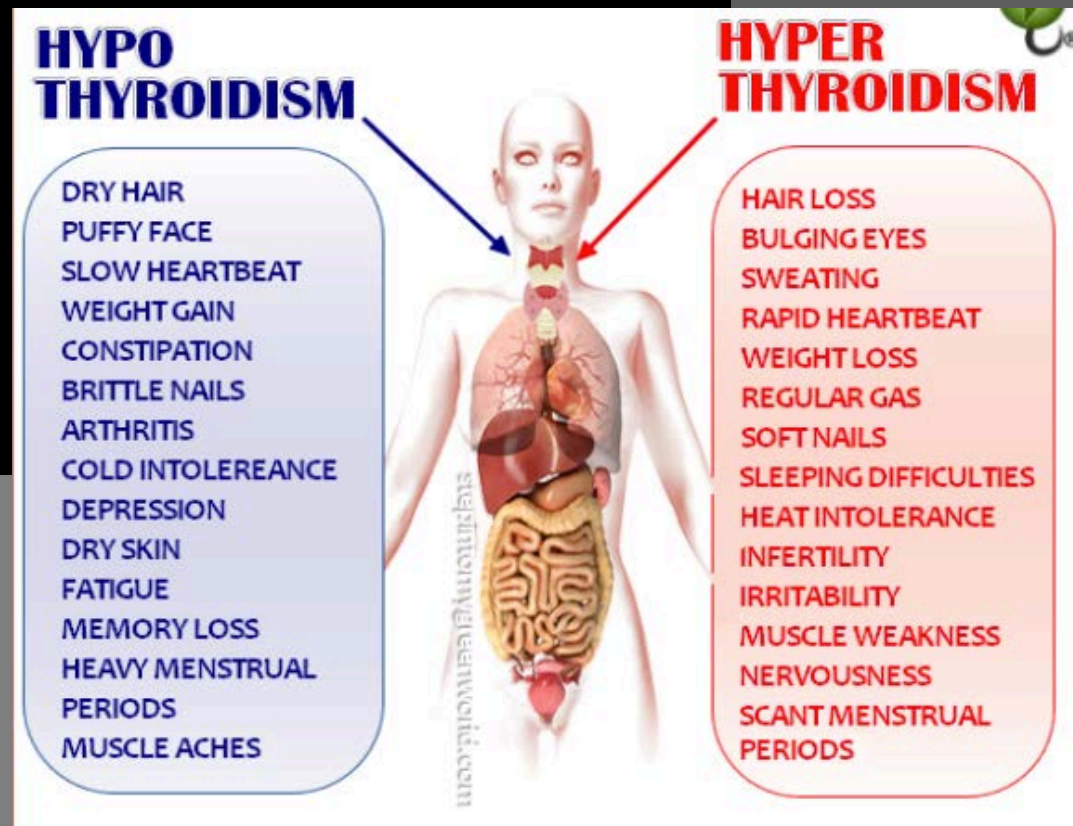
- Intermittent claudication
- Statin induced myelopathy
- Restless leg syndrome



# HX: Thyroid Disease

## Rule out symptoms

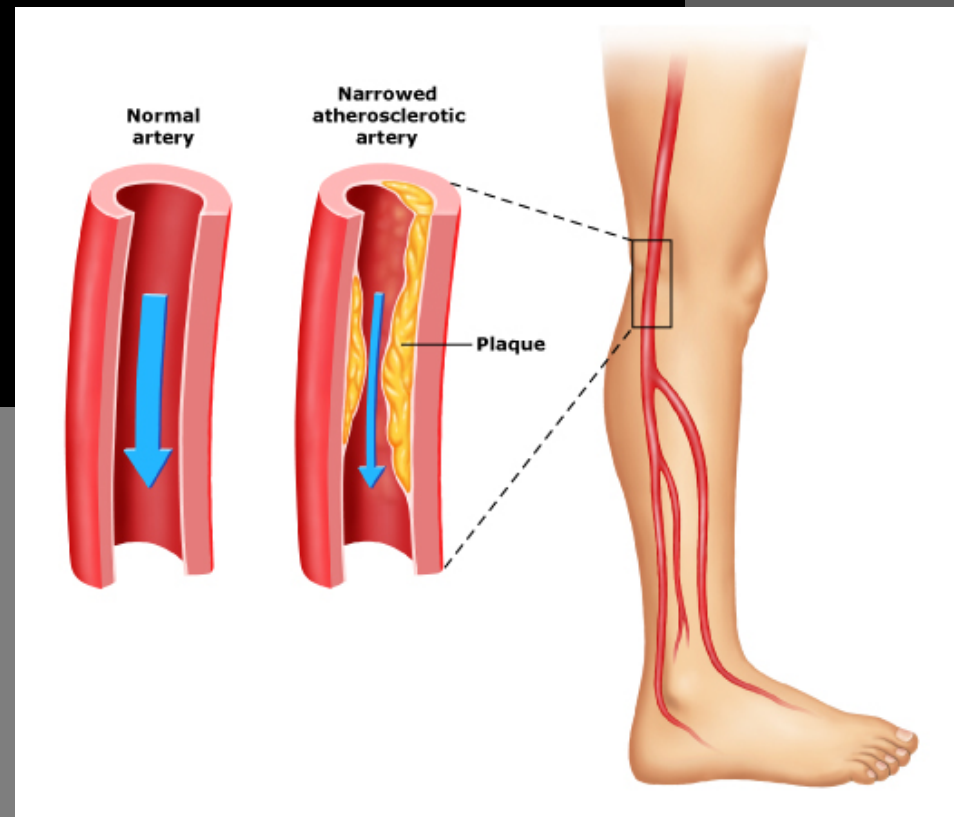
- Weakness and fasciculation's of lower motor neuron disease
- Cold or heat intolerance
- Skin changes
- Etc.



# HX: Intermittent Claudication

Cramp location specific in the calves.

- ⊙ Aggravation w/ walking
- ⊙ Alleviation w/ rest
- ⊙ Narrowing of artery



# HX: General Continued

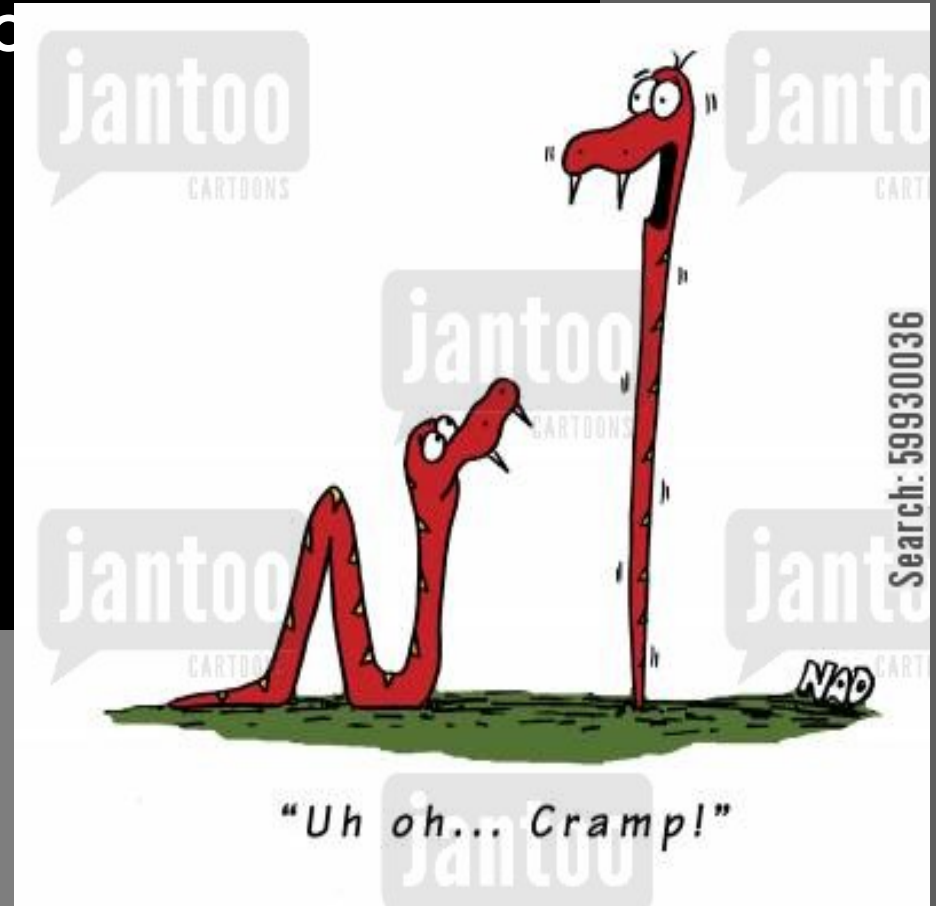
## Ask/Review of Medication

- Statins
- Tamoxifen

## Any history of thyroidectomy (Plus Parathyroid removal)

- Pertinent in suspected Tetany

## Look for signs of dehydration



# Physical Examination

## Check for:

- Dehydration
- Drop in BP
- Rise in pulse
- Peripheral edema
- Examine for thyroid disease
- Evidence of thyroidectomy
- Diminished or absence of pulse, muscle wasting, soreness, and fasciculation of the lower extremities.



"It's a clear case of dehydration."