

Ken Milne COI:

- **Grants/Research Support:** None
- **Speaker Bureau/Honorarium:** None
- **Consulting Fees:** None
- **Patents:** PedEBoard
- **Other:** Senior Editor AEM and CorePendium, Faculty CCME and EMRAP, and Medical Expert Witness



SGEM#280:

**This Old Heart of Mine
and Troponin Testing**



**Dr. James
Vandenberg:**

James has a master's degree in clinical investigation from Washington University and is currently the Chief Resident at Detroit Receiving Hospital.



Dr. Andrew Huang:
Andy went to Kansas
City University for
medical school and is
now PGY3 at DMC Sinai
Grace Hospital.

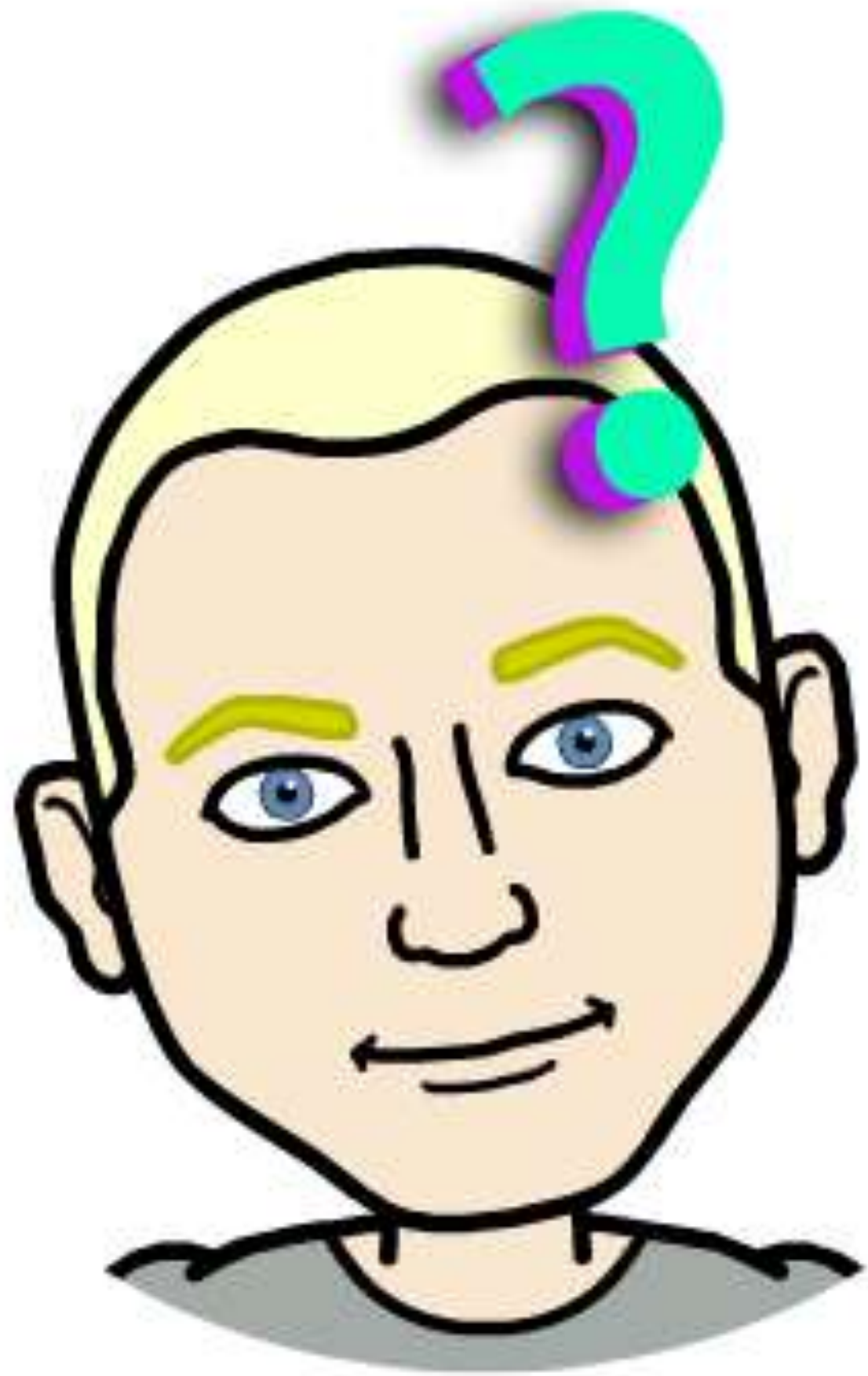


Case:

- 78yo man with *multiple complaints*
- Why here?
- Geriatrogram
- Could it be ACS?

Grey Tsunami





Question:

What is the frequency of ACS in elderly patients presenting to the ED with nonspecific complaints and what is the utility of troponin testing in this population?

ORIGINAL CONTRIBUTION

Troponin Testing and Coronary Syndrome in Geriatric Patients With Nonspecific Complaints: Are We Overtesting?

Alfred Z. Wang, MD, Jason T. Schaffer, MD, Daniel B. Holt, MD,
Keaton L. Morgan, MD, and Benton R. Hunter, MD 

P

> 64 yo Non-Specific Complaints

I

Troponin Testing

C

None

O

Five Outcomes of Interest



Dr. Alfred Wang

An emergency
medicine physician
at Indiana University
in Indianapolis, IN.

Conclusions:



Dr. Worster

Table 2. Description of methods criteria.*

Method Criterion	Method Criterion Description
1. Abstractors training	Were the abstractors trained before the data collection?
2. Case selection criteria	Were the inclusion and exclusion criteria for case selection defined?
3. Variable definition	Were the variables defined?
4. Abstraction forms	Did the abstractors use data abstraction forms?
5. Performance monitored	Was the abstractors' performance monitored?
6. Blind to hypothesis	Were the abstractors aware of the hypothesis/study objectives?
7. IRR mentioned	Was the interobserver reliability discussed?
8. IRR tested	Was the interobserver reliability tested or measured?
9. Medical record identified	Was the medical record database identified or described?
10. Sampling method	Was the method of sampling described?
11. Missing-data management plan	Was the statistical management of missing data described?
12. Institutional review board approval	Was the study approved by the institutional or ethics review board?

IRR, Interrater reliability.

*Method criteria 1 to 8 from Gilbert et al.³

Checklist

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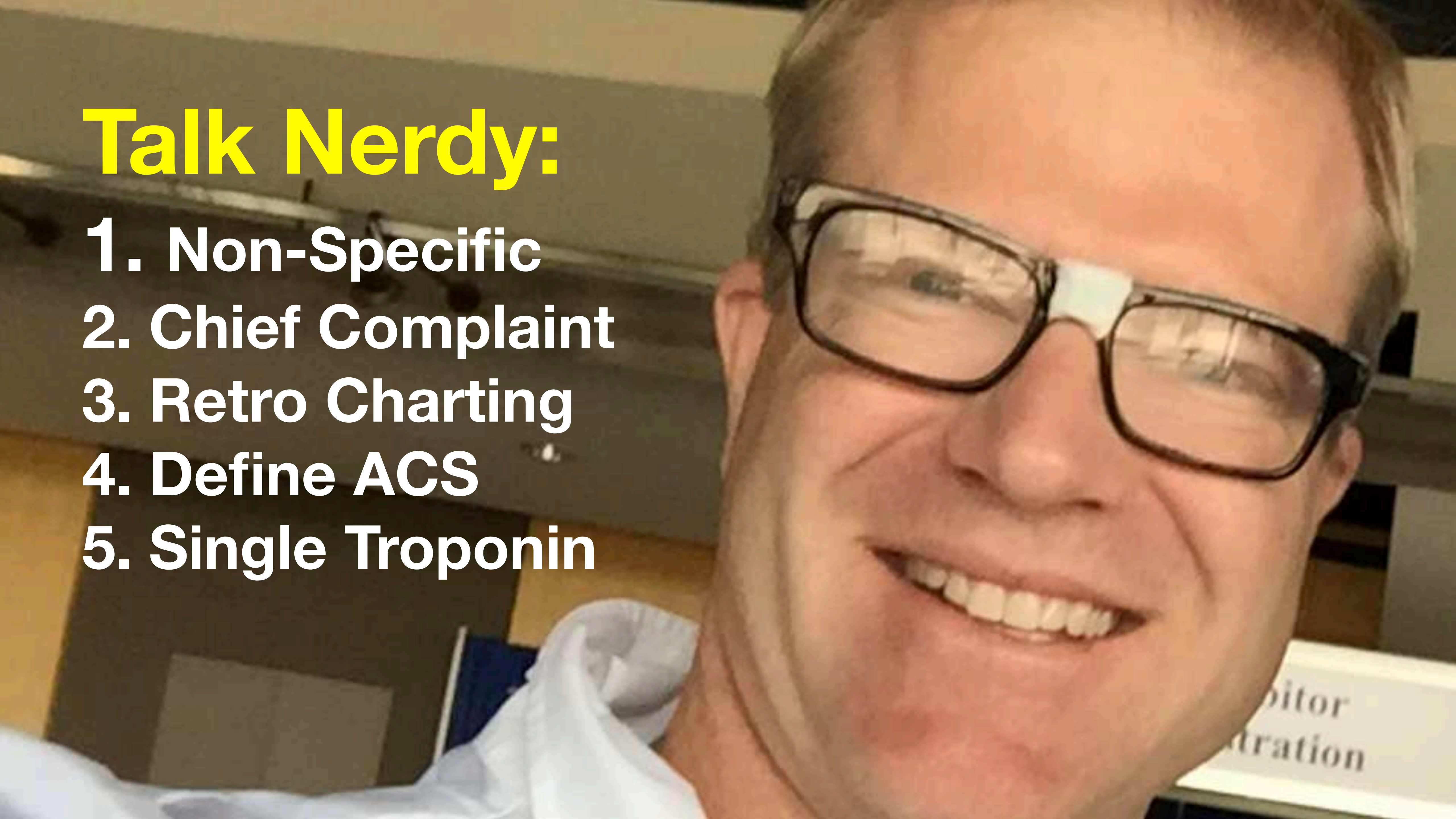
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- 69% (412/594) got a troponin
- 13% (52/412) were elevated
- 1% (5/412) Dx with ACS
- NPV 100% and PPV 6%
- Most were false positives
(ex dehydration, HF and AF)

Talk Nerdy:

- 1. Non-Specific**
- 2. Chief Complaint**
- 3. Retro Charting**
- 4. Define ACS**
- 5. Single Troponin**



Talk Nerdy II:

A man with long, dark, curly hair is shown in profile, facing right. He is wearing a blue felt hat with a red and yellow striped band. He is dressed in a white button-down shirt and a green and white striped tie. He is holding a yellow pipe with a black stem in his mouth. The background is a blurred outdoor setting with a chain-link fence and some foliage.

6. Trop Assay

7. Trop Rise&Fall

8. Selection Bias

9. PPV

10. Deaths



SGEM Bottom Line:

In this retrospective study of elderly patients presenting to the ED with nonspecific complaints, the diagnosis of ACS was rare, and troponin testing had limited value.



Keener Contest:

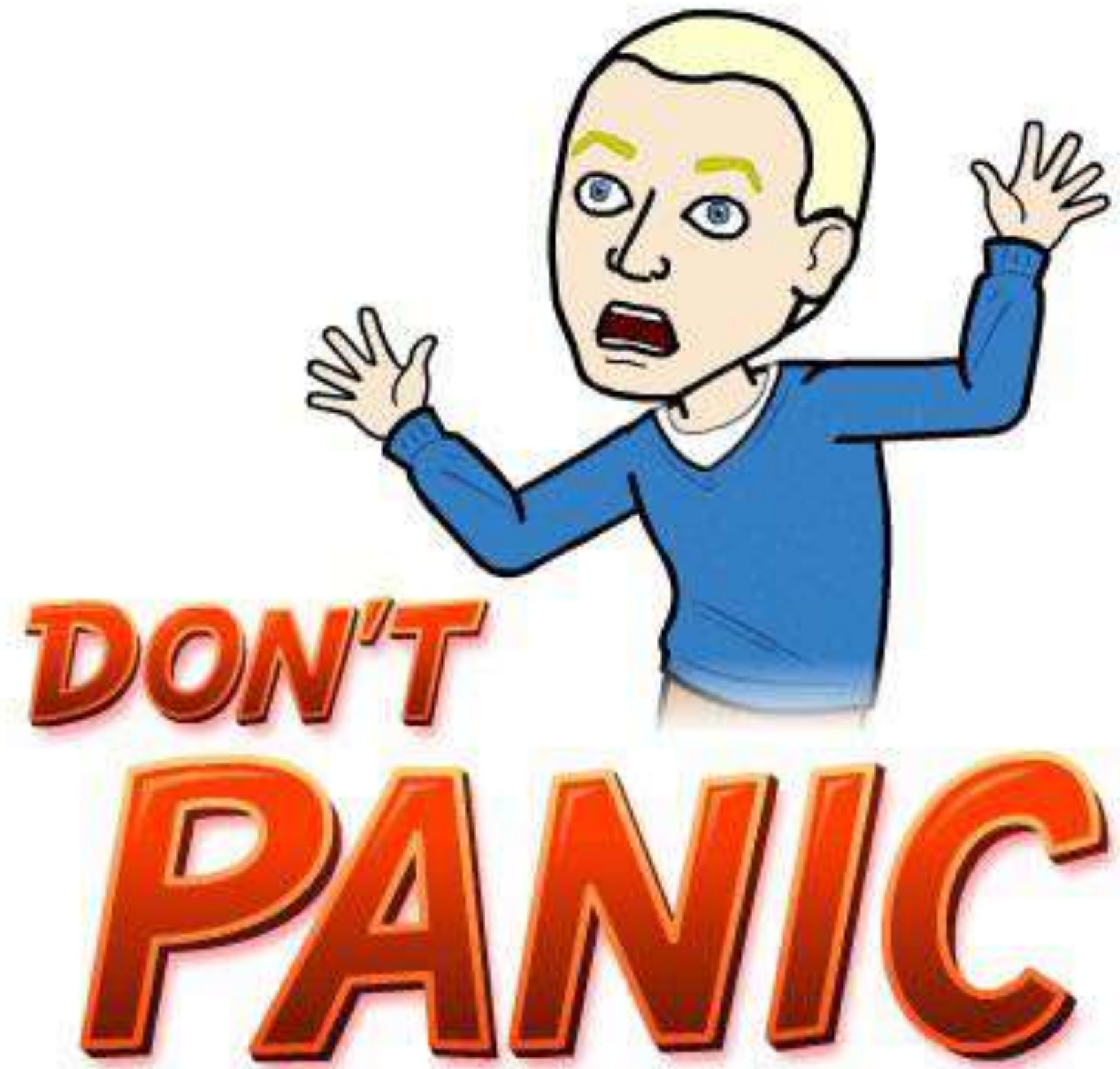
What is the
meaning of the
word Michigan?



#SGEMHOP

AEMA

Podcasts



Remember to be skeptical of anything you learn, even if you heard it on the

**Skeptics' Guide to
Emergency Medicine.**