

Acupuncture in the ED



Acupuncture

Traditional Chinese Medicine

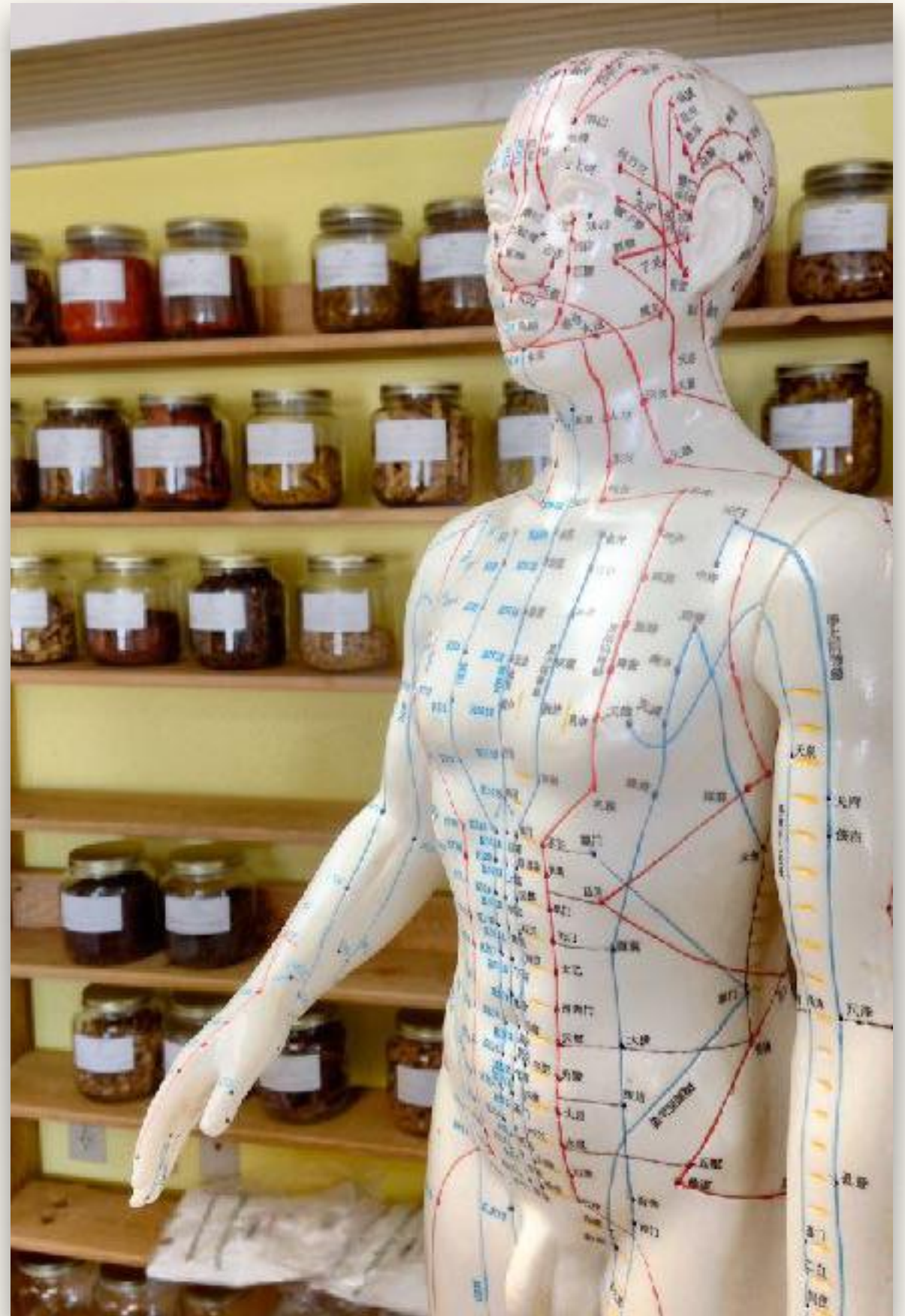
Meridians

Chi / Qi

Blocked

Setting of Needles

Restore Balance



Acupuncture for Pain in the ED?



Cohen et al. Acupuncture for analgesia in the emergency department: A multicentre, randomised, equivalence and non-inferiority trial. MJA 2017



Dr. Michael Ben-Meir

Acupuncture for Pain in the ED?

- ❖ No statistical difference between groups
- ❖ < 20% had a clinical reduction (<4)
- ❖ < 40% had a statistical reduction of pain (>2 point drop)

	All Patients	Acupuncture Only	Acupuncture + Pharm	Pharma Only	P
Clinically Relevant	16%	13%	17%	17%	0.56
Statistical Relevant	36.9%	33%	38%	39%	0.49

Acupuncture for Pain in the ED?

- ❖ Blinding
- ❖ Sham
- ❖ Straw Man
- ❖ Consecutive
- ❖ Selection Bias



SGEM#187: No good evidence

Blinding

Mesmerized



Beltaief K et al. Acupuncture versus titrated morphine in acute renal colic: a randomized controlled trial. J Pain Res. 2018

P	• Patient
I	• Intervention
C	• Comparison
O	• Outcome



Acupuncture for Renal Colic?

- ❖ No statistical difference between groups
- ❖ Acupuncture 87% vs. morphine 83%
- ❖ Faster with acupuncture



Acupuncture for Renal Colic?

- ❖ Randomization
- ❖ Blinding
- ❖ Sham
- ❖ Characteristics
- ❖ Composite Outcome



SGEM#220: Claim not supported

Fox LM et al. Battlefield acupuncture to treat low back pain in the emergency department. Am J EM 2018

P	• Patient
I	• Intervention
C	• Comparison
O	• Outcome



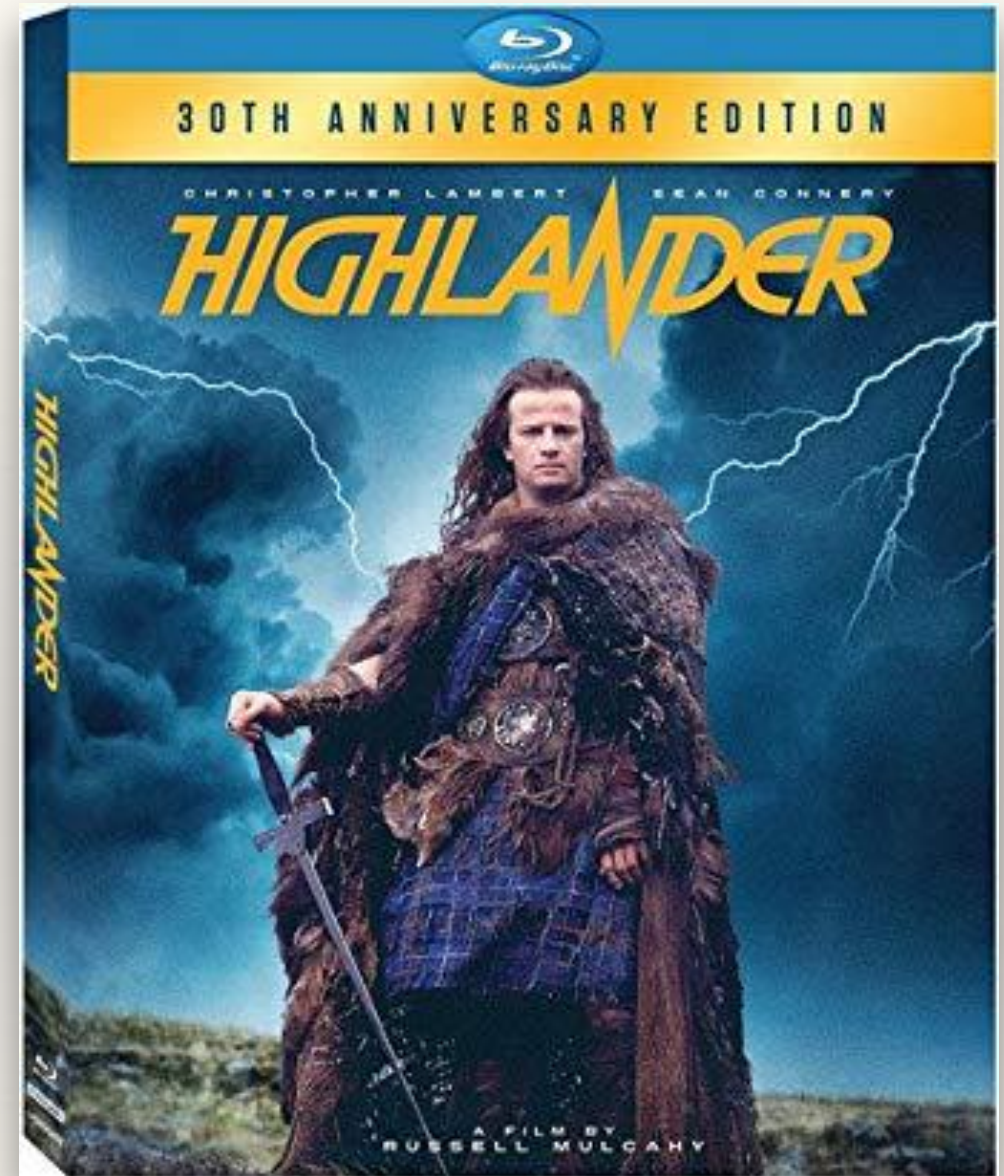
Battlefield Acupuncture?

- ❖ No statistical difference in GUGT
- ❖ Statistical benefit in pain reduction with acupuncture at 60min



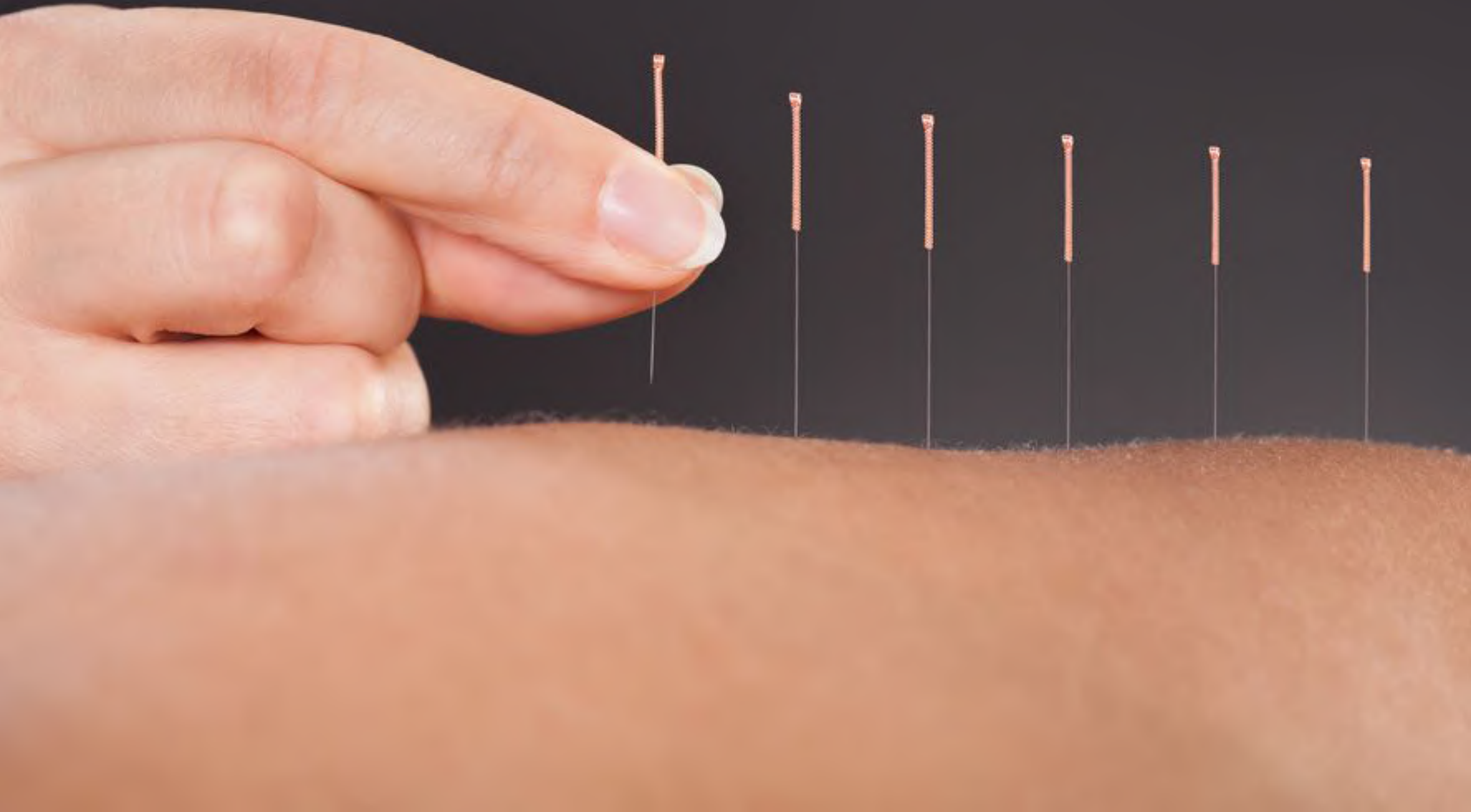
Battlefield Acupuncture?

- ❖ Blinding and Sham
- ❖ Small (n=25)
- ❖ Clinical Significance?
- ❖ 2 Primary Outcomes
- ❖ www.ClinicalTrials.gov



SGEM#224: Cannot recommend

What about the harms?



Bayesian Thinking

$$P(A|B) = \frac{P(B|A) P(A)}{P(B)}$$

THE PROBABILITY OF "B" BEING TRUE GIVEN THAT "A" IS TRUE

THE PROBABILITY OF "A" BEING TRUE

THE PROBABILITY OF "A" BEING TRUE GIVEN THAT "B" IS TRUE

THE PROBABILITY OF "B" BEING TRUE

- ❖ Posterior probability is dependent on prior probability.




Tooth-Fairy Science

- ❖ Dr. Harriet Hall
- ❖ Beyond EBM
- ❖ Science-Based
Medicine



Acupuncture

thou shalt not commit logical fallacies



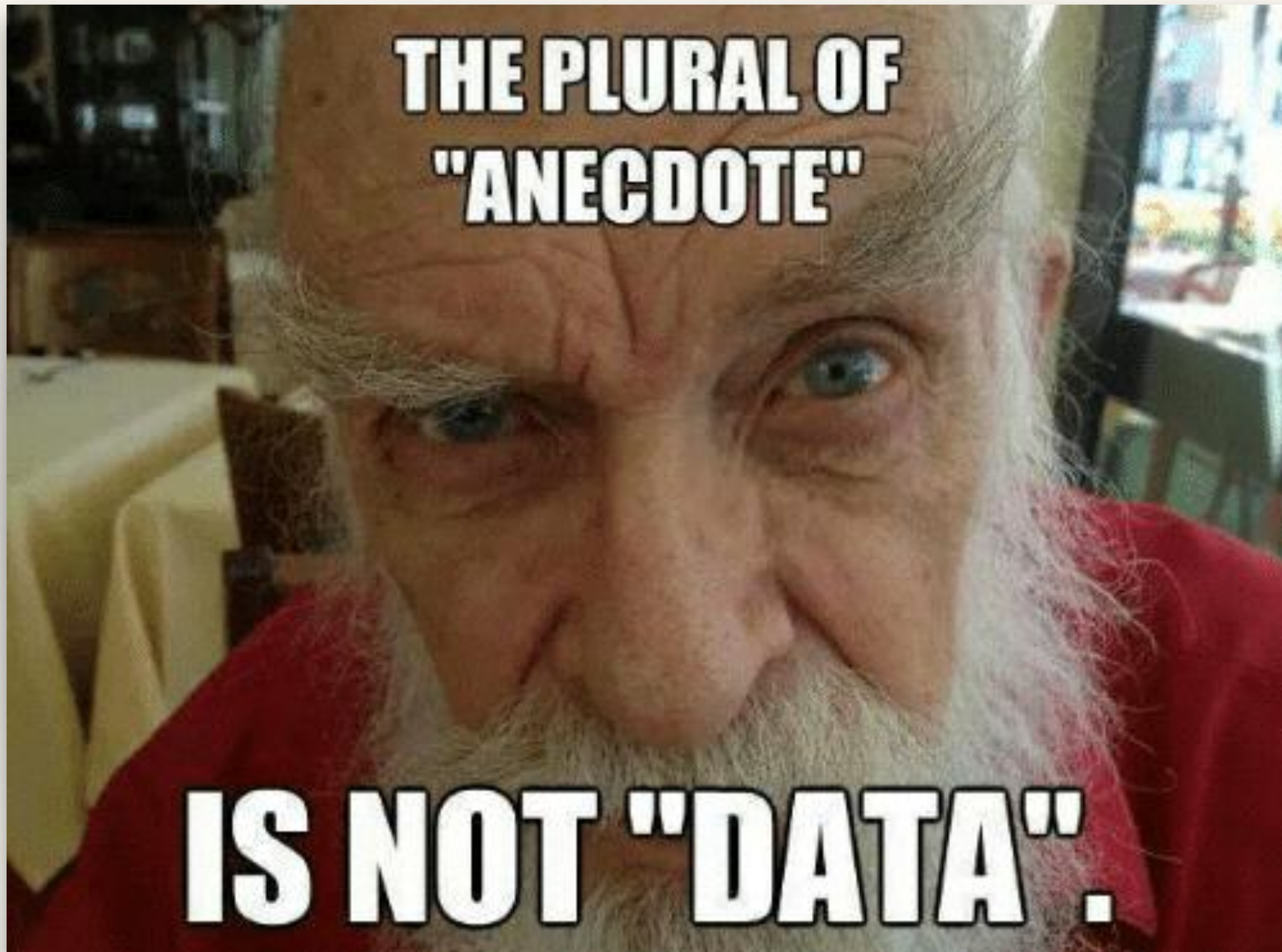
burden of proof

Saying that the burden of proof lies not with the person making the claim, but with someone else to disprove.

Straw Man



Anecdotal



Appeal to Emotion



Ad Hominem



Bandwagon



Appeal to Tradition



Burden of Proof



Acupuncture in the ED?

