EMPoweRx
conference

A conference that is for us and by us

Emergency Medicine Pharmacotherapy with Resuscitation (EMPoweRx) Conference

OPIOID-SPARING THERAPIES IN THE ED

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@painfreeED

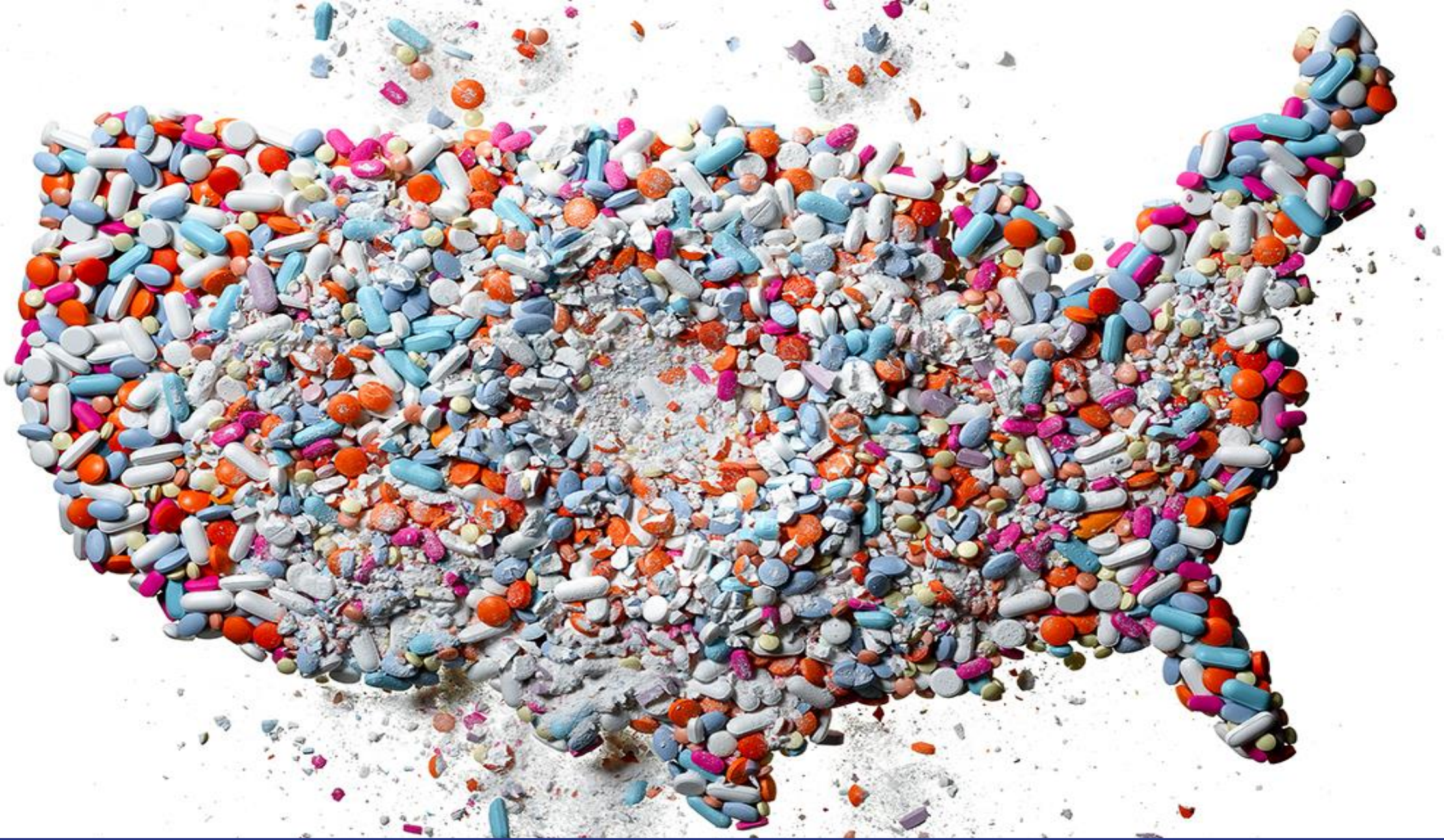
DISCLOSURES

- I have no disclosures to report

Objectives

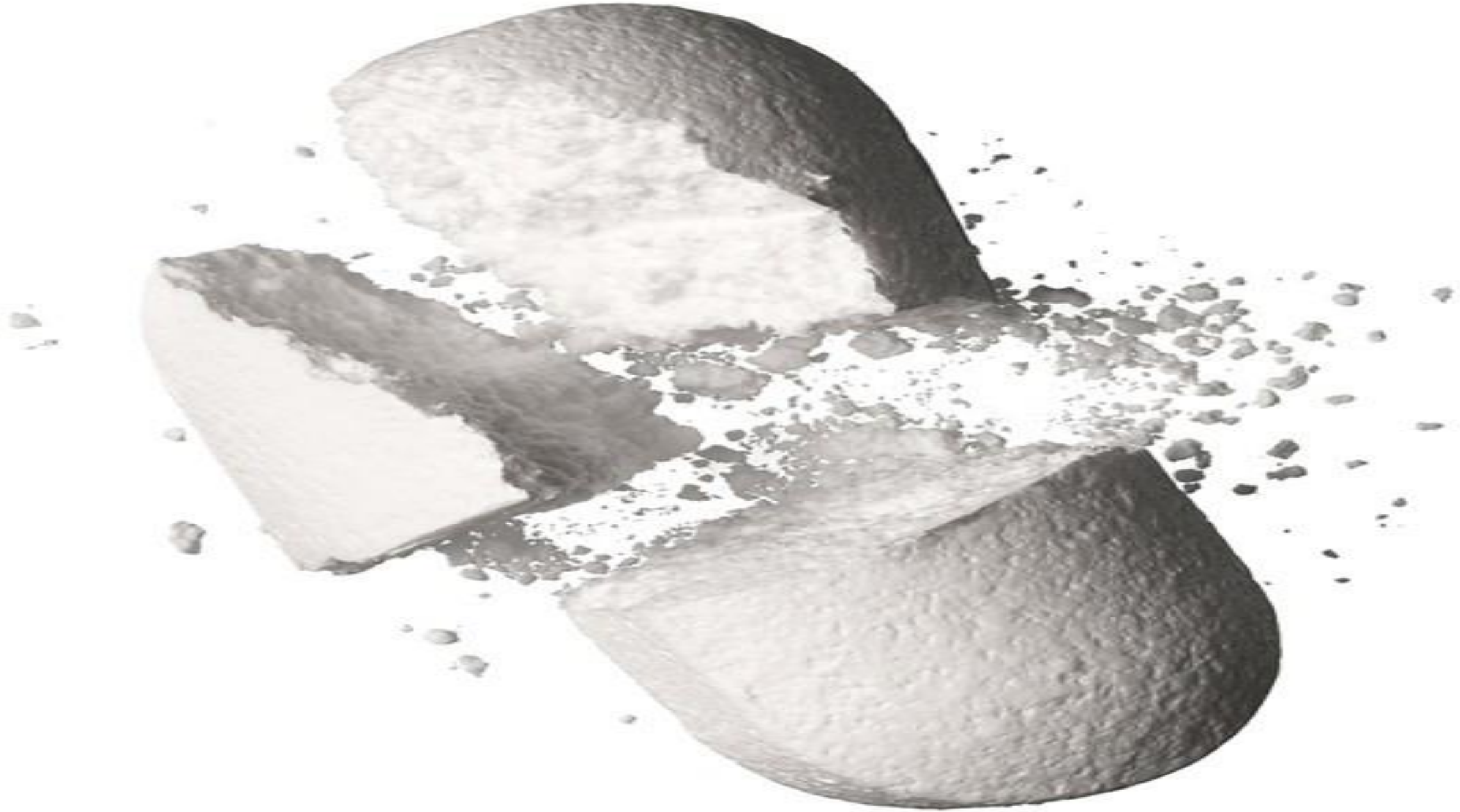
- Identify non-opioid analgesic modalities available in the Emergency Department (ED)
- Evaluate advantages and disadvantages of commonly used non-opioid therapies in the ED based on the current evidence


THANK YOU




In
loving
Memory


ADDICTION



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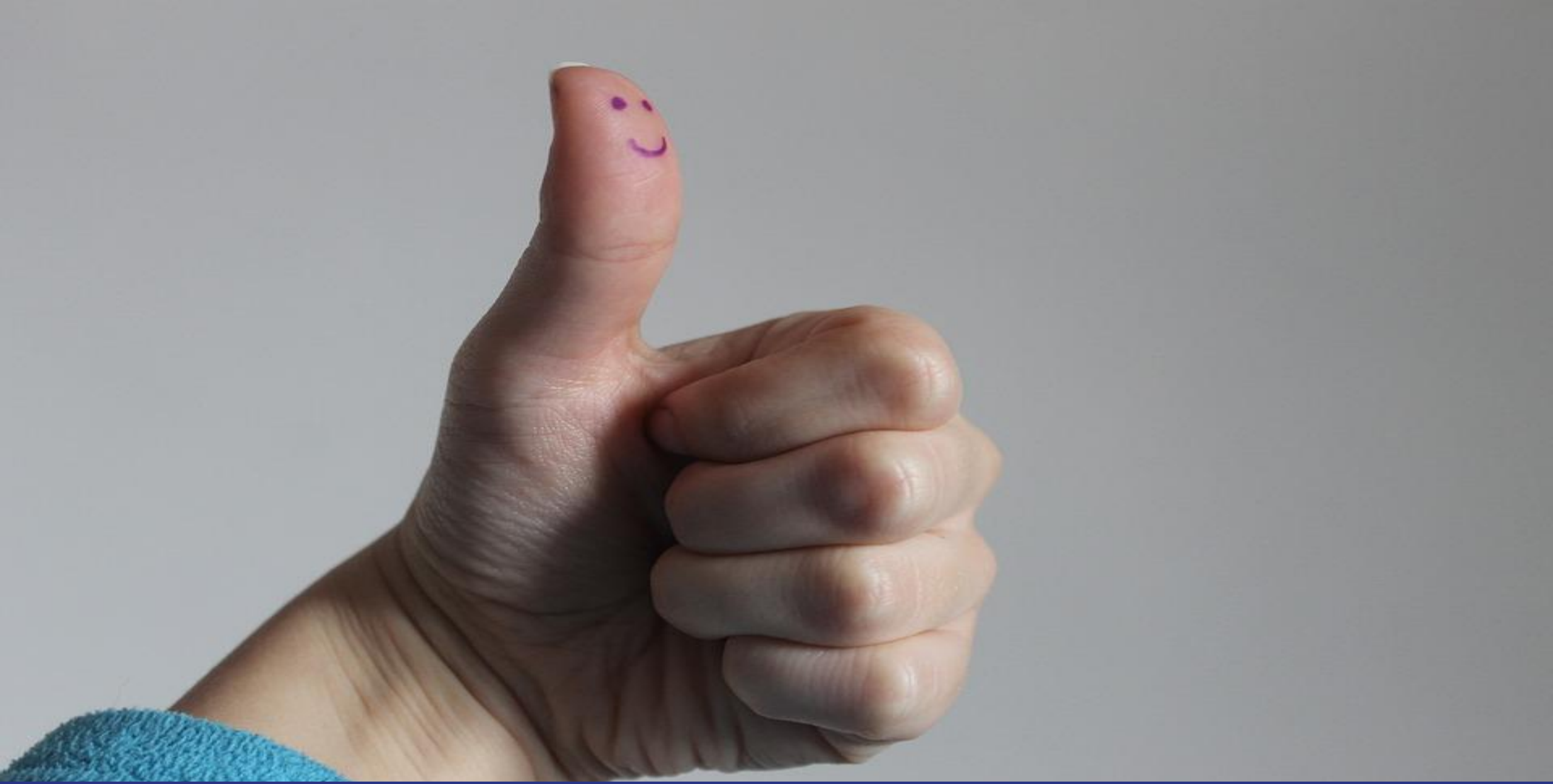
CERTA

NON-PHARMACOLOGICAL MANAGEMENT OF PAIN

OPIOIDS

Alternatives



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NSAIDs

Analgesic Ceiling

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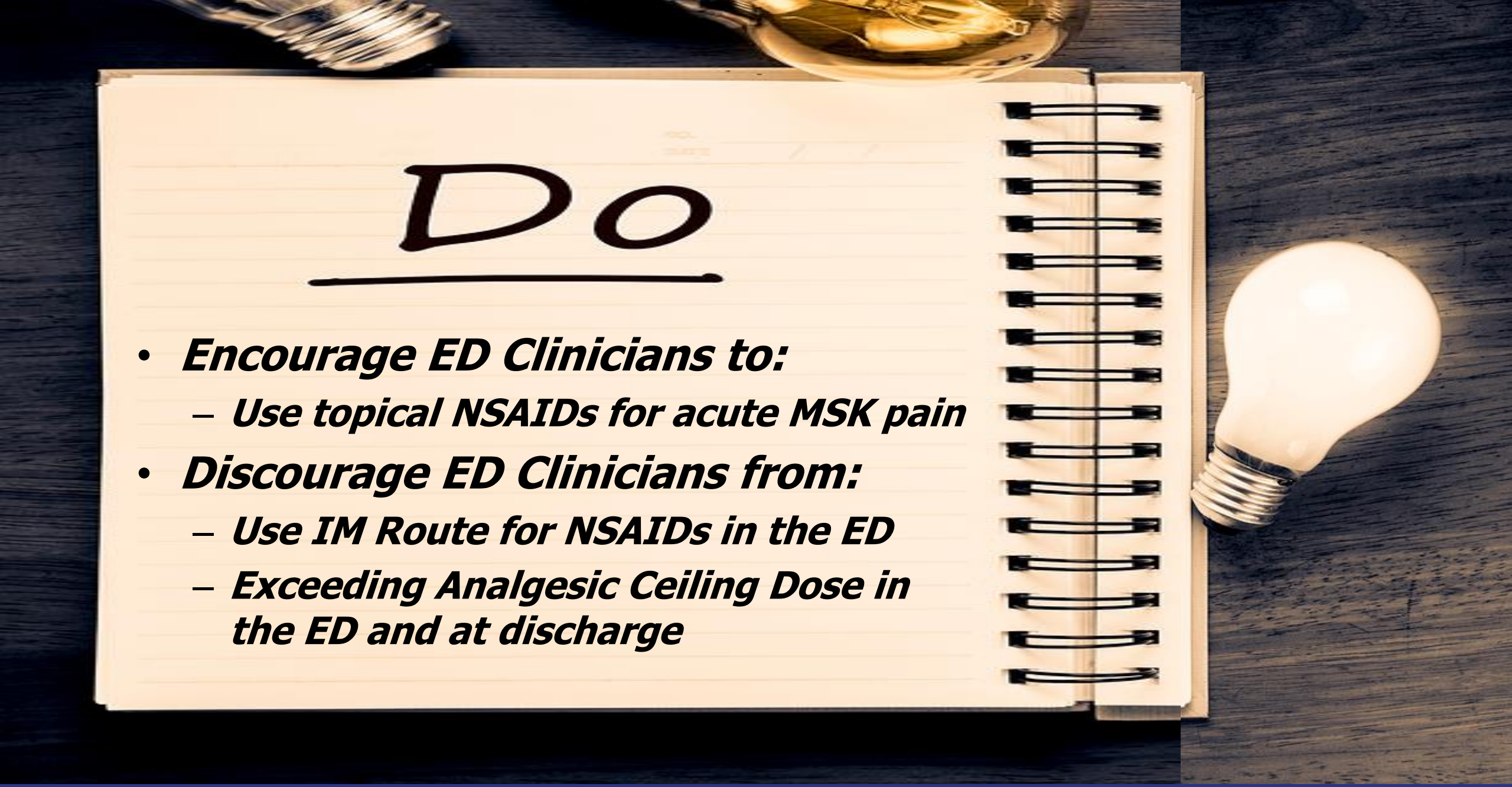
Codispoti 2001, Motov 2019

Catapano 1996, Ong 2007

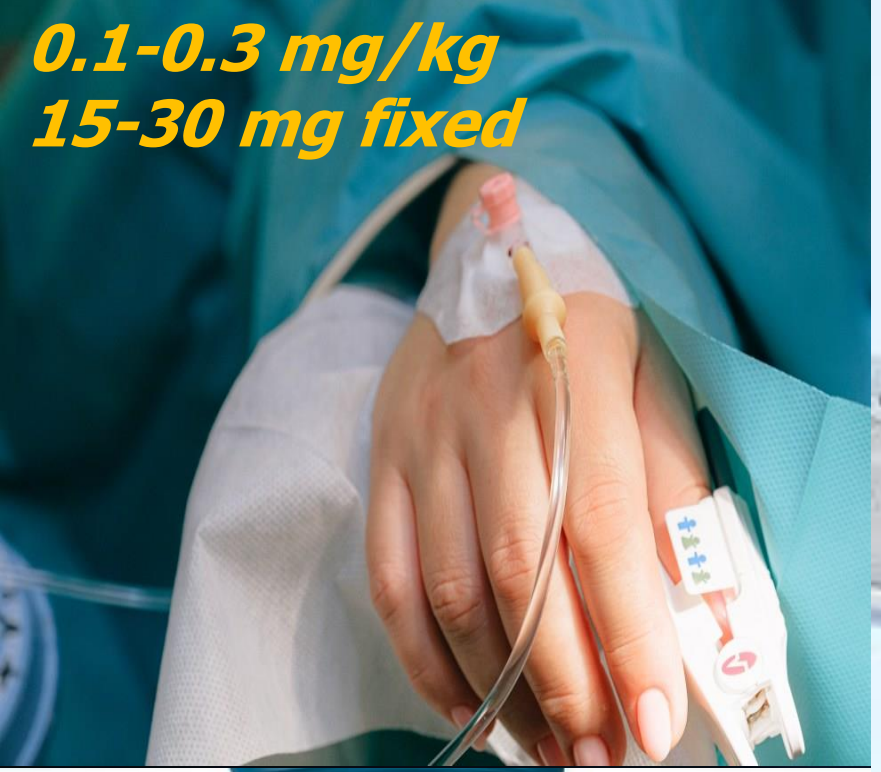

USE THE
LOWEST
EFFECTIVE
DOSE
FOR THE
SHORTEST
PERIOD OF
TIME

diclofenac epolamine



- ***Encourage ED Clinicians to:***
  - ***Use topical NSAIDs for acute MSK pain***
- ***Discourage ED Clinicians from:***
  - ***Use IM Route for NSAIDs in the ED***
  - ***Exceeding Analgesic Ceiling Dose in the ED and at discharge***


Ketamine
Ketamine


0.1-0.3 mg/kg
15-30 mg fixed


Ketamine


0.5-1 mg/kg


0.1-0.15 mg/kg/hr


0.1-0.3 mg/kg

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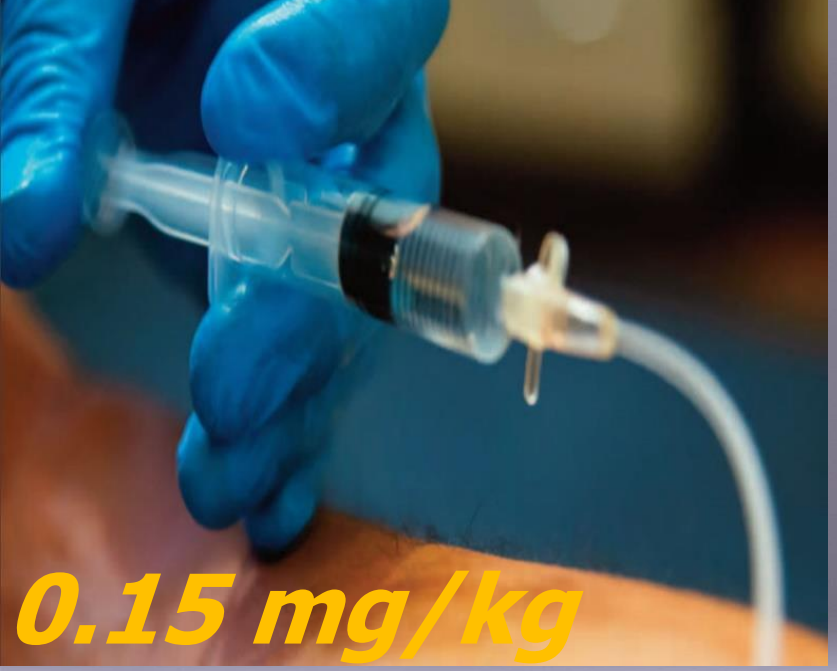
Miller 2014, Motov 2015

Goltser 2015, Motov 2017


WHAT'S NEW?



0.15 mg/kg

VS.

0.3 mg/kg

Analgesia

=

SIDE EFFECTS

BAN

Drapkin 2020, Fassassi 2020

REBELEM

The KetaBAN Trial:
Nebulized Ketamine for Analgesia in the ED

REBELEM

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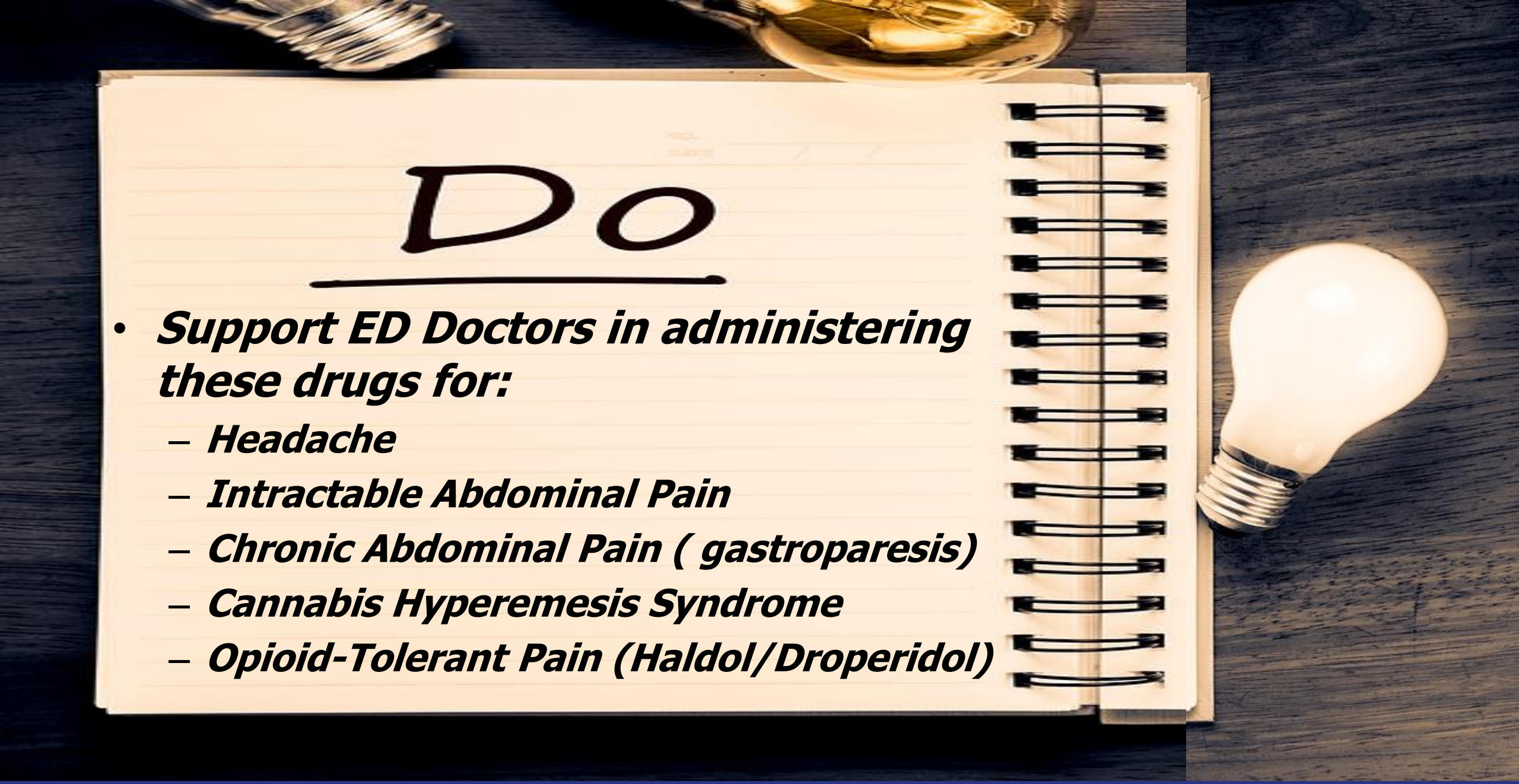
Dove 2021

0.75 mg/kg = ***1 mg/kg*** = ***1.5 mg/kg***

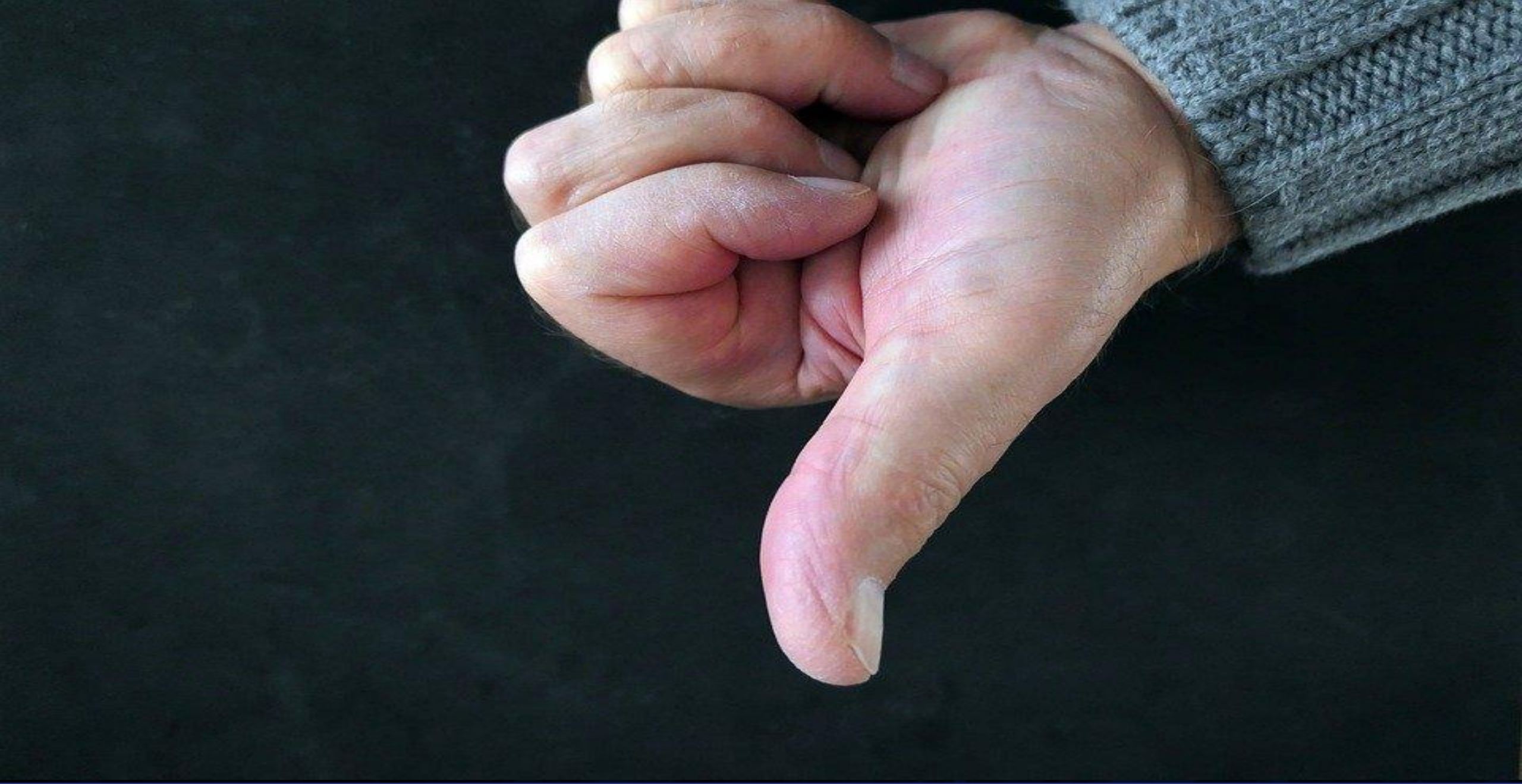
- *#sayyestoketamine*
- *Encourage ED Clinicians to use SDK for:*
  - *Acute and Chronic Pain in the ED*
  - *Opioid-tolerant pain*
  - *Opioid-induced hyperalgesia*
  - *Cancer Pain*

Antidopaminergics

Friedman 2006, Moussa 2021



- ***Support ED Doctors in administering these drugs for:***
  - ***Headache***
  - ***Intractable Abdominal Pain***
  - ***Chronic Abdominal Pain (gastroparesis)***
  - ***Cannabis Hyperemesis Syndrome***
  - ***Opioid-Tolerant Pain (Haldol/Droperidol)***




Gabapentin


Insanity

Enke et al 2018


INEFECTIVE


SIDE EFFECT

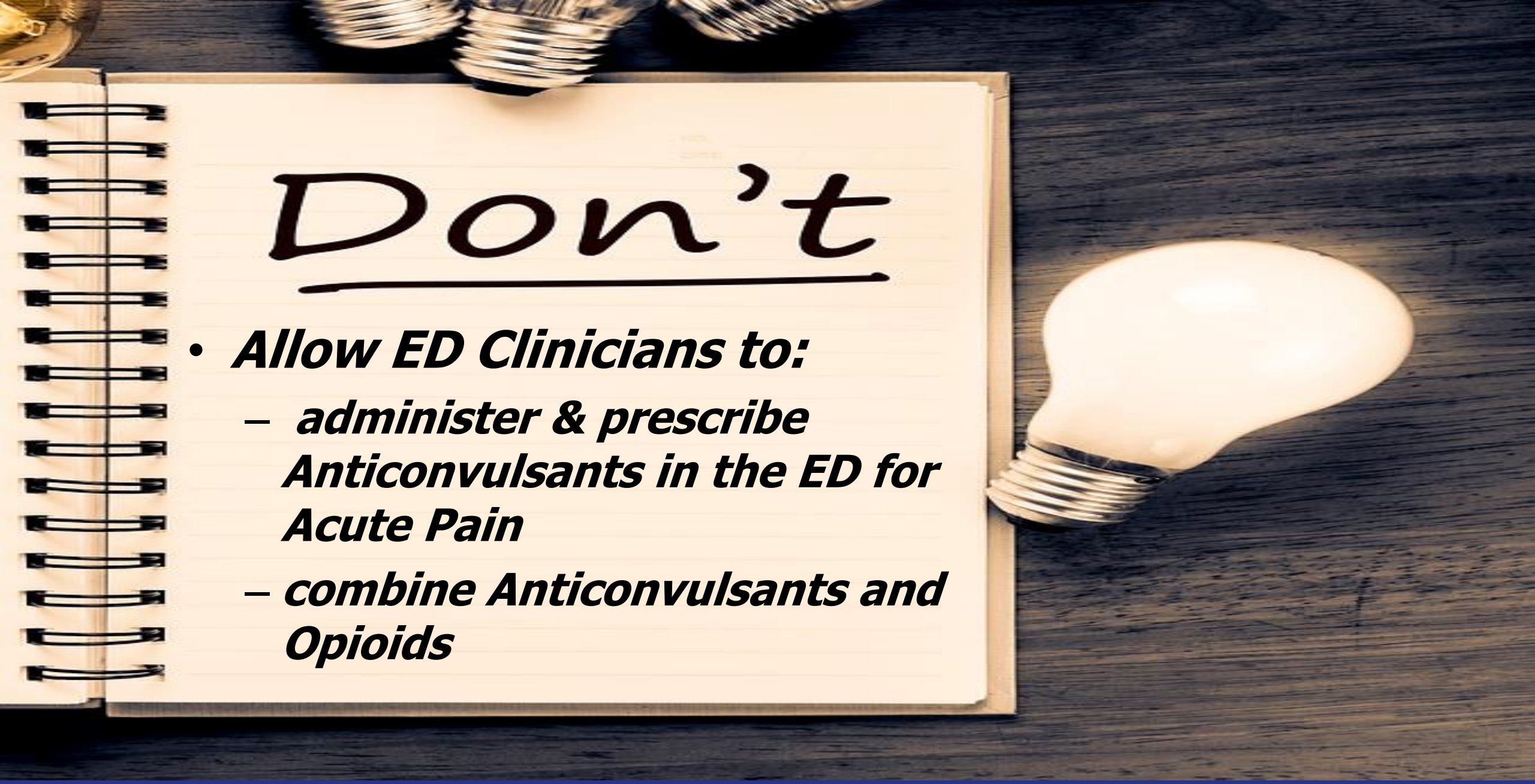
Smith 2016

GABAPENTIN

Fatal Misuse

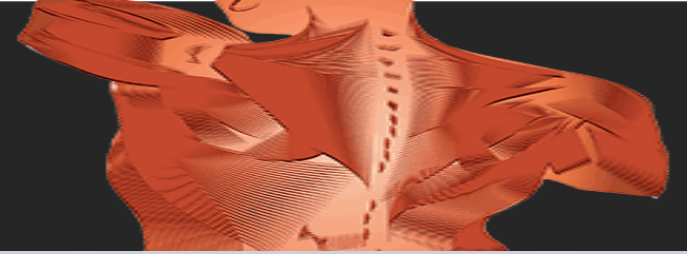
40-65% individuals with RX

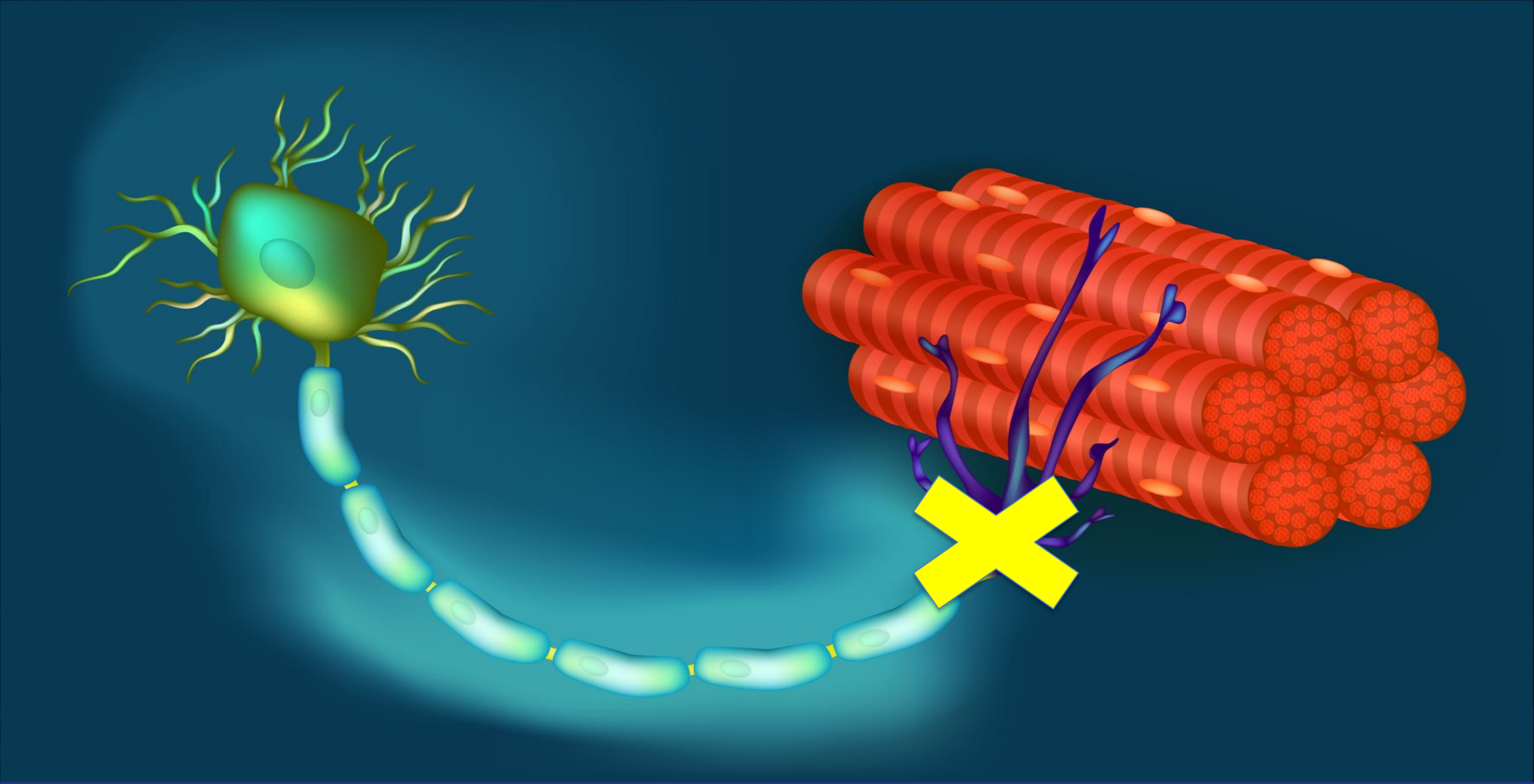
15-22% individuals abusing opioids



- ***Allow ED Clinicians to:***
  - ***administer & prescribe Anticonvulsants in the ED for Acute Pain***
  - ***combine Anticonvulsants and Opioids***

Muscle Relaxants





Drug (Combo)	Moderate-to severe pain at 1 week (% of patients)	Improvement in disability (points on RMDQ) at 1 week	Adverse events
Friedman et al 2019			
Ibuprofen+ placebo	30%	11.1	7%
Ibuprofen+metaxalone	37%	10.1	9%
Ibuprofen+Tizanidine	33%	11.2	8%
Ibuprofen+baclofen	33%	10.6	10%
Friedman et al 2018			
Naproxen +orphenadrine	39%	9.4	9%
Naproxen+ methcarbamol	33%	8.1	19%
Naproxen+placebo	34%	10.7	17%
Friedman et al 2016			
Naproxen+placebo	22%	11	15%
Naproxen+Diazepam	32%	11	22%
Friedman et al 2015			
Naproxen+ placebo	46%	9.8	22%
Naproxen+ cyclobenzaprine	40%	10.1	36%

Cashin 2021

Analgesia

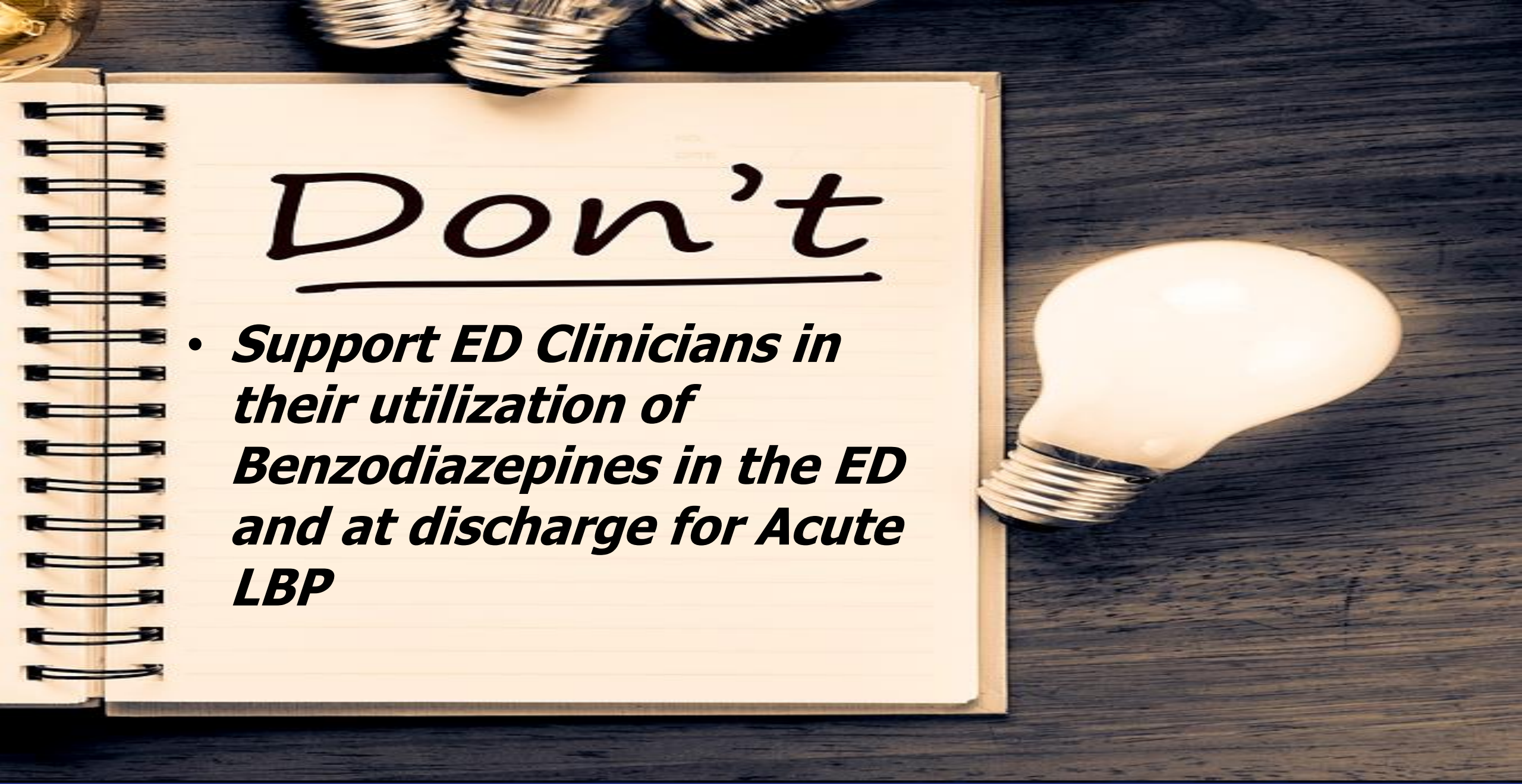
8 points on a 0–100-point scale (<2 weeks)


Don't
• Allow ED Doctors to administer & prescribe SMR for:
– Any Pain
– Especially Acute Low Back Pain


Medical Center

BENZODIAZEPINES

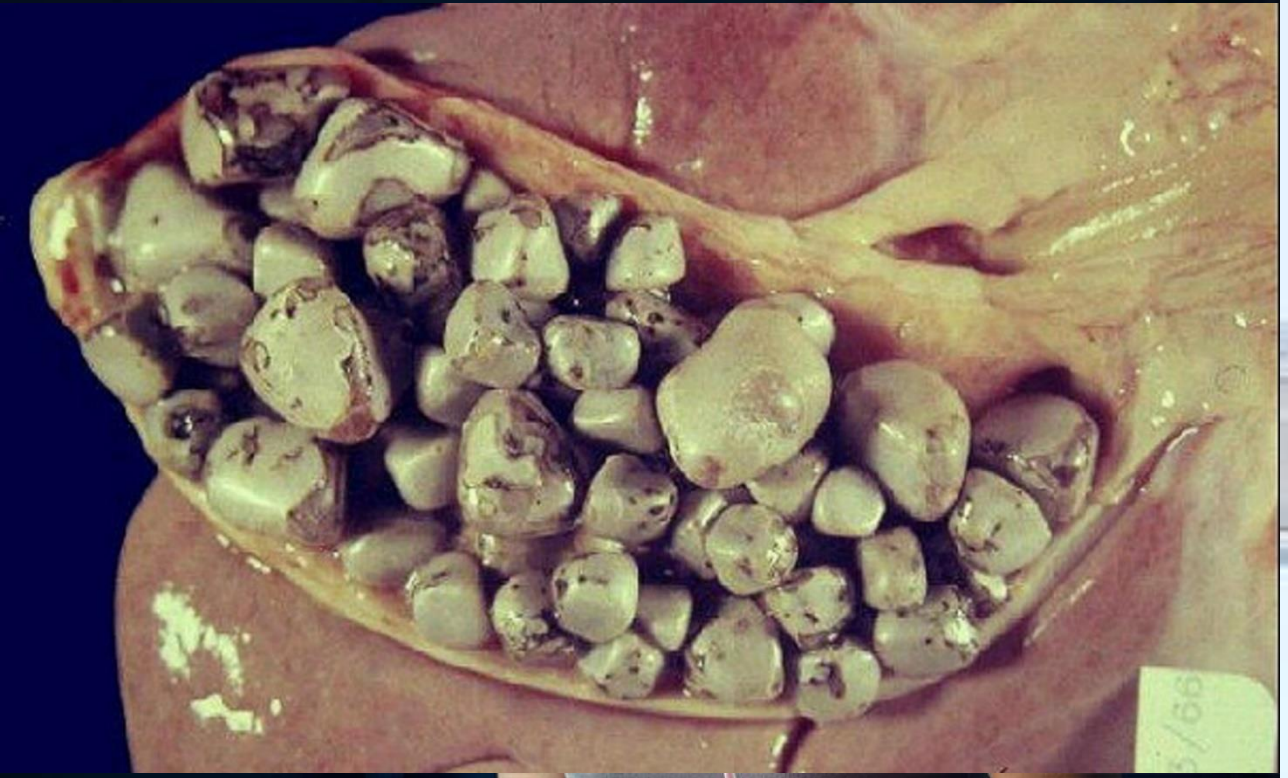
Drug (Combo)	Moderate-to severe pain at 1 week (% of patients)	Improvement in disability (points on RMDQ) at 1 week	Adverse events
Friedman et al 2016			
Naproxen+placebo	22%	11	15%
Naproxen+Diazepam	32%	11	22%



- ***Support ED Clinicians in their utilization of Benzodiazepines in the ED and at discharge for Acute LBP***

Acetaminophen

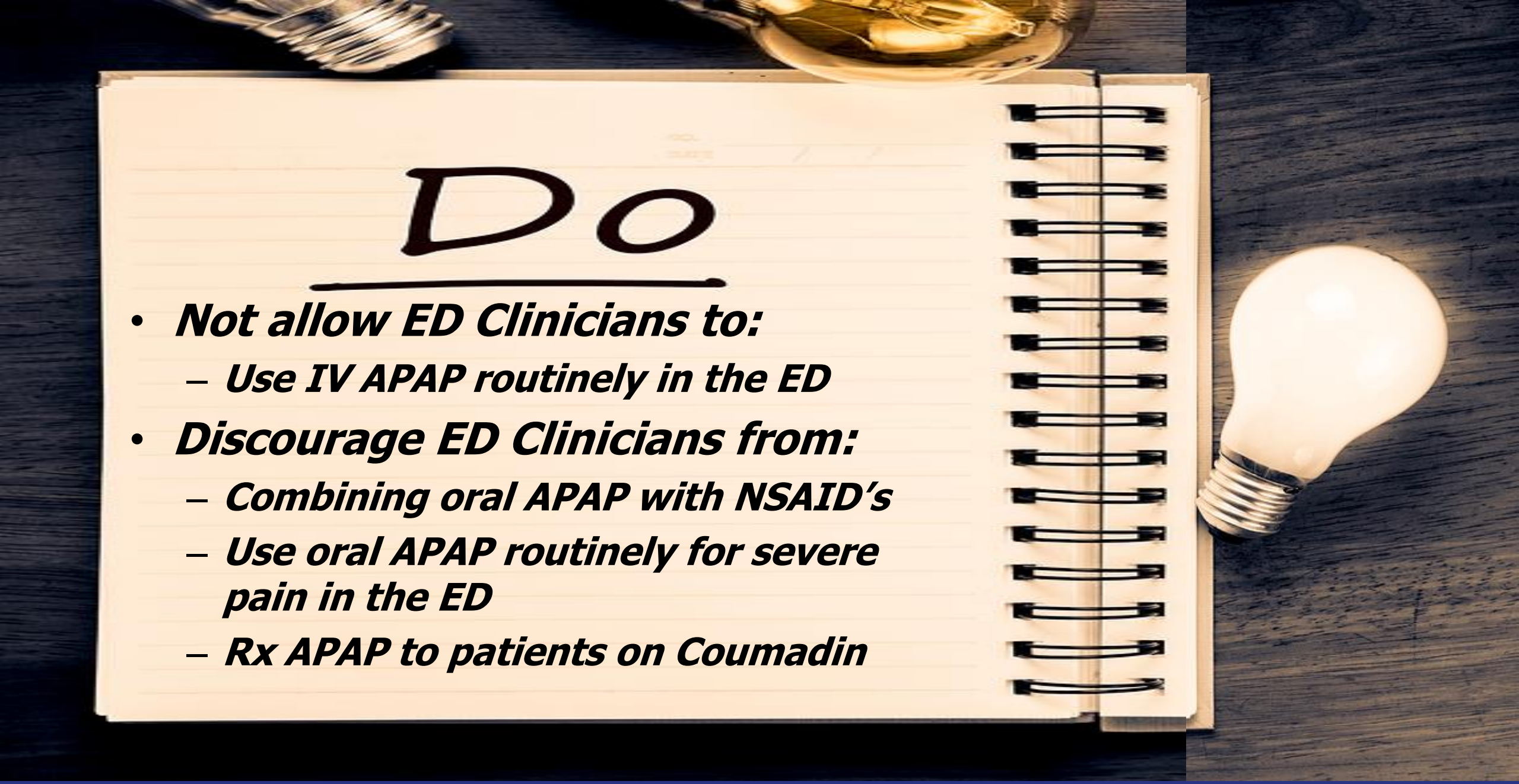
Acetaminophen



Bektas 2009, Barnaby 2019

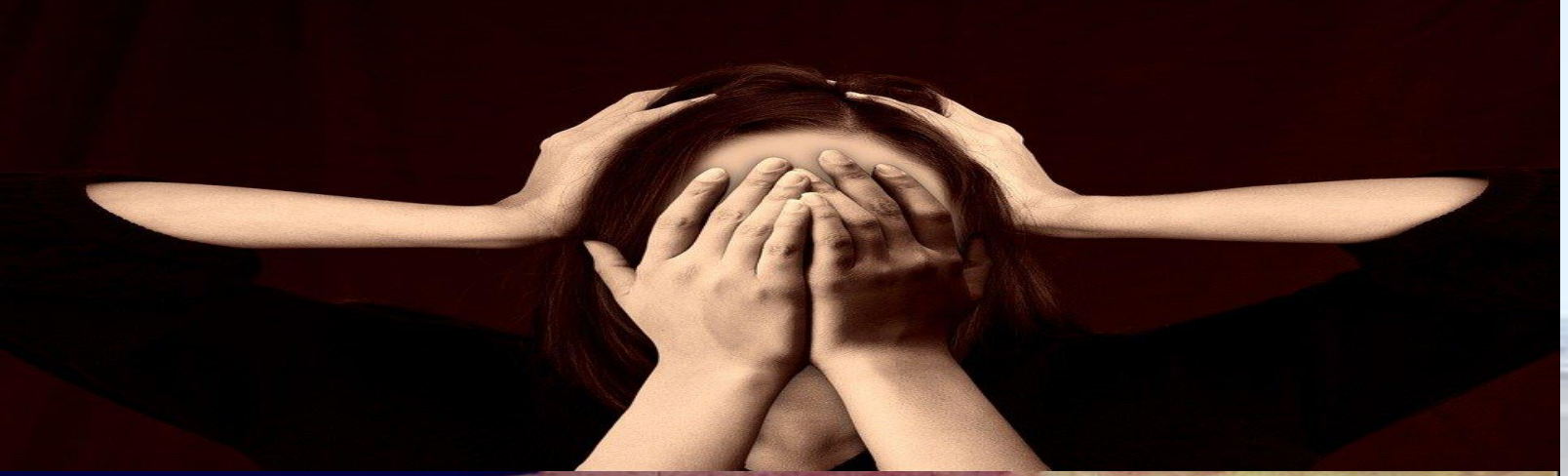

Non-
Superior
Expensive
Non-
titratable
Dosing
Errors
Inferior


Acetaminophen
Saragiotto et al 2016
PLACEBO
Acetaminophen
Ibuprofen
Friedman et al 2020
Ibuprofen

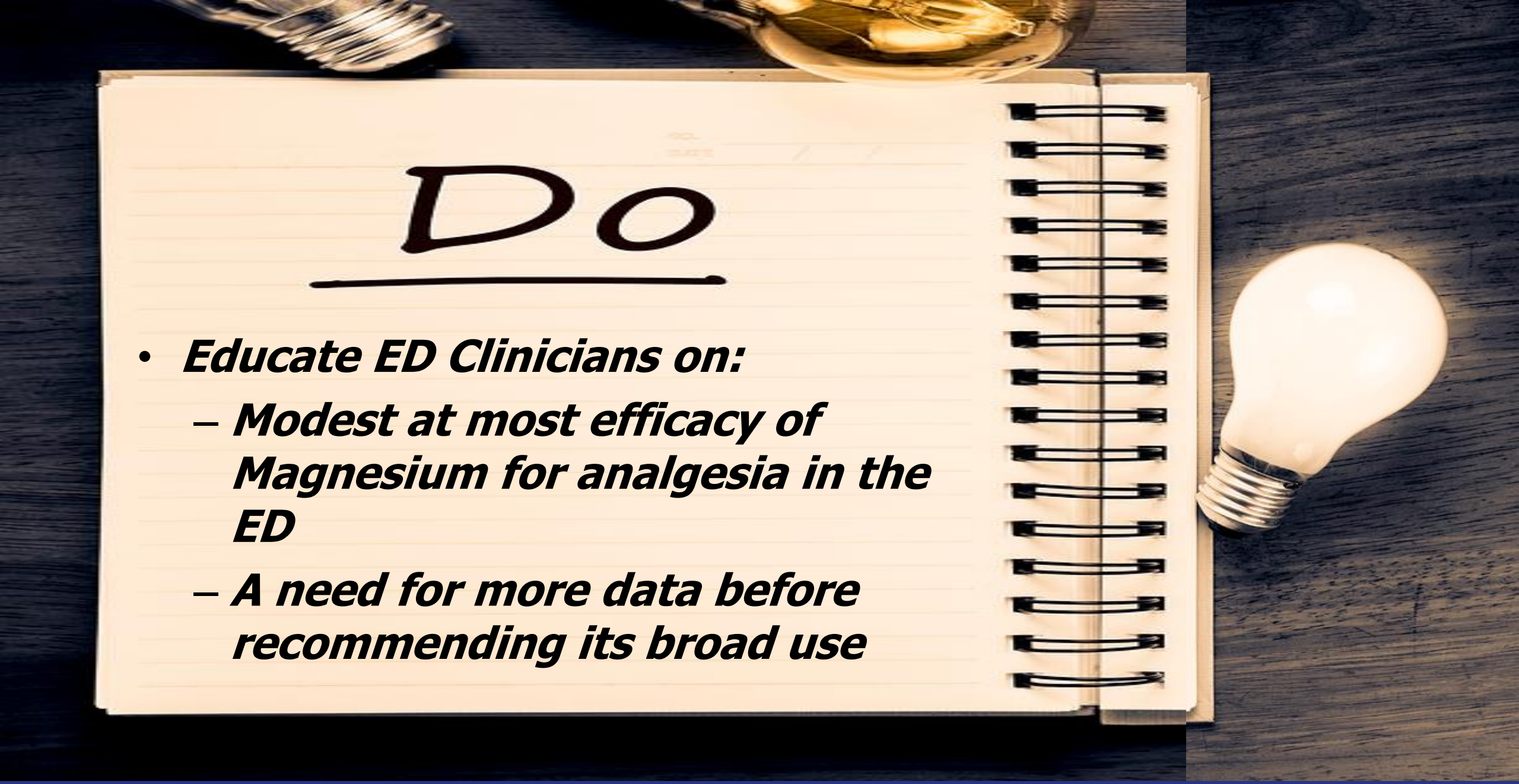


- ***Not allow ED Clinicians to:***
  - ***Use IV APAP routinely in the ED***
- ***Discourage ED Clinicians from:***
  - ***Combining oral APAP with NSAID's***
  - ***Use oral APAP routinely for severe pain in the ED***
  - ***Rx APAP to patients on Coumadin***

MAGNESIUM



1g IV infusion

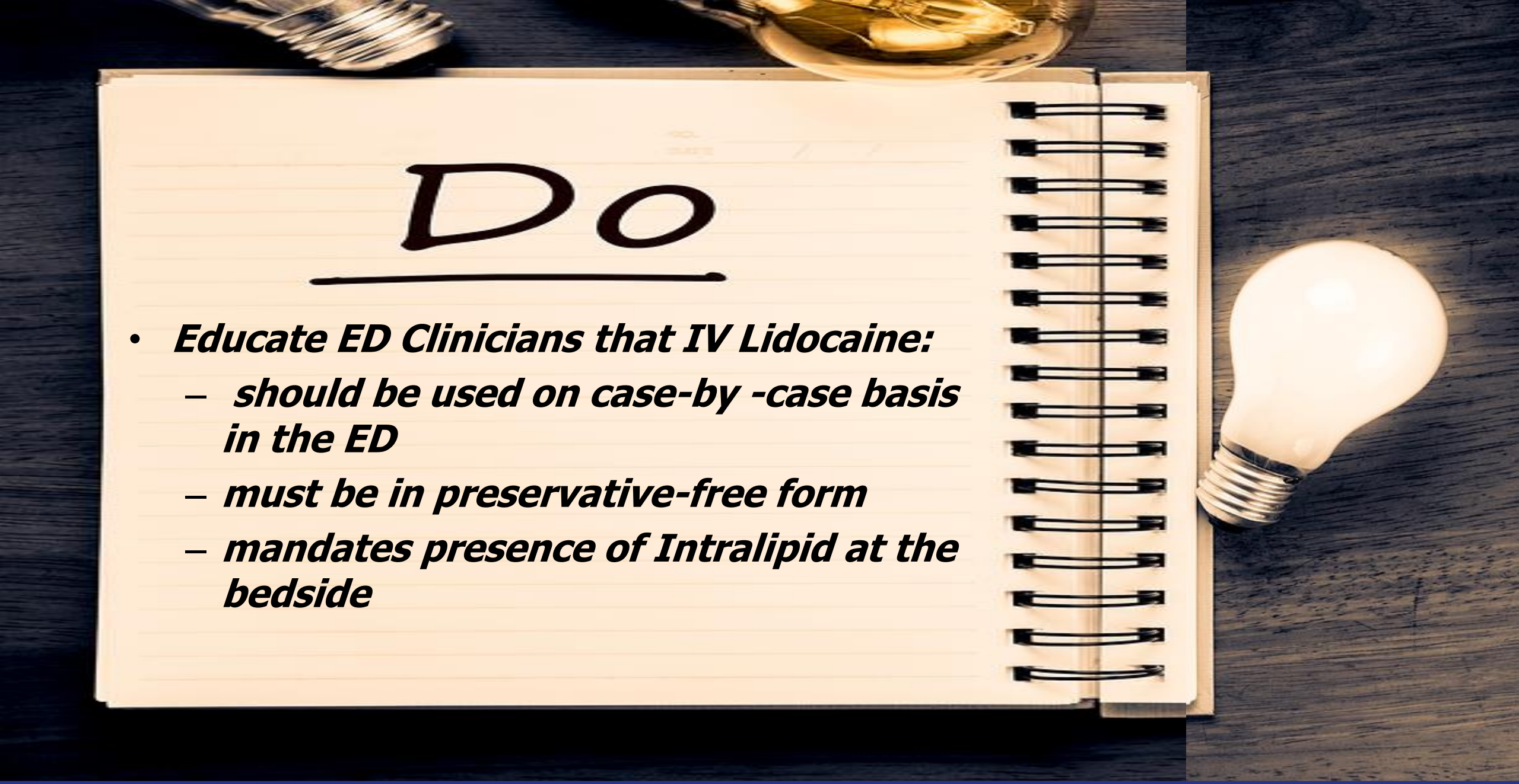


- ***Educate ED Clinicians on:***
  - ***Modest at most efficacy of Magnesium for analgesia in the ED***
  - ***A need for more data before recommending its broad use***

IV: 1-1.5 mg/kg over 10-15 minutes

Soleimanpour 2012, Chinn 2019, Tanen 2014

inferior

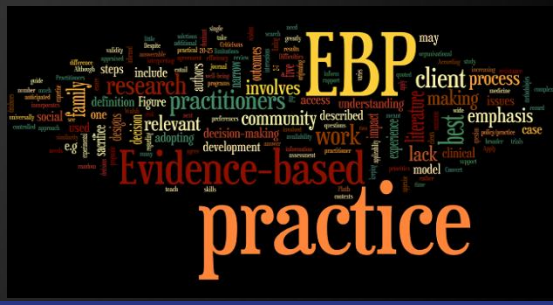


- ***Educate ED Clinicians that IV Lidocaine:***
  - ***should be used on case-by -case basis in the ED***
  - ***must be in preservative-free form***
  - ***mandates presence of Intralipid at the bedside***


summary

SAFE

EFFECTIVE



Utilization of CERTA concept in the ED would result in:

A. Greater analgesia by combining different analgesics
B. Administration of smaller doses of analgesics
C. Less side effects
D. Better ED throughput
E. All the above

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In order to decrease psycho-perceptual side effects, (mostly unreality feeling) associated with Sub-dissociative Ketamine administration, clinicians might consider to:

A. Use intravenous Midazolam
B. Use small doses of Propofol
C. Use Ketamine infusion over 15 min
D. Use Intranasal Ketamine

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Problems associated with ED use of IV Acetaminophen include:

A. Infusion over 15 min
B. Extreme cost
C. Pediatric dosing errors
D. All of the above

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Use of NSAID's for acute pain in the ED should follow these principles:

A. Use lowest effective dose for shortest effective treatment course
B. Caution should be executed in patients with GI hemorrhage, renal insufficiency, congestive heart failure, and elderly
C. When systemic NSAID's are undesirable, topical NSAID's should be utilized
D. All of the above

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Based on the current literature, the limiting factors to widespread use of IV lidocaine in the ED are:

A. Poor data to support its use
B. Need for more robust research
C. Need for protocolized approach to IV Lidocaine in the ED
D. Need for an expansion of the studies to elderly patients and patients with pre-existing cardiac disease
E. All of the above

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thank you
danke
謝謝
ngiyabonga
teşekkür ederim
gracias
merci
obrigado
dziękuję
bedankt
go raibh maith agat
sukriya
kop khun krap
terima kasih
grazie
arigatô
dakujem
мерси
спасибо
рахмат
Баярлалаа
faafetai lava
kiitos
dankie
dhanyavad
mauruuru
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