

Emergency and Acute Care Journal Club

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Norman Regional Health
System





Disclosures

- Still waiting to hit it big

Objectives

Discuss TXA for Nosebleed

Can we prescribe yoga for headaches?

What about nebulized ketamine?

Is the oral medicine for Covid-19 effective?

Do we need a fluid bolus during RSI?

Objectives

Is there a better way for digital blocks?

Can we revisit high flow nasal cannula during intubation?

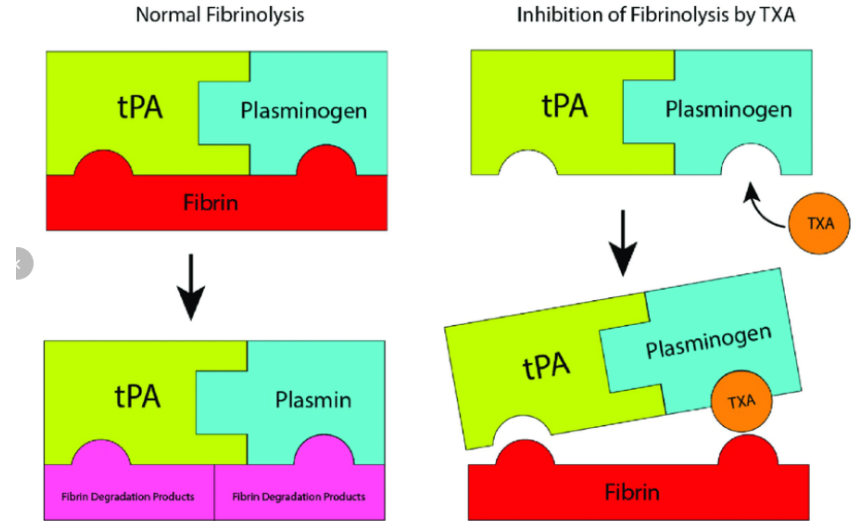
Are we treating back pain appropriately?

How should we alter our treatment for UTI with alkaline urine?

Avoid fire hazards

TXA for Nosebleed

- Janapala RN, Tran QK, Patel J, Mehta E, Pourmand A. Efficacy of topical tranexamic acid in epistaxis: A systematic review and meta-analysis. Am J Emerg Med. 2022 Jan;51:169-175. doi: 10.1016/j.ajem.2021.10.043. Epub 2021 Nov 1. PMID: 34763235.



TXA interaction with plasminogen. Tranexamic Acid(TXA) inhibits fibrinolysis through its binding to plasminogen (Pg). This binding prevents plasminogen from binding to fibrin, which inhibits activation through tPA. <https://doi.org/10.1371/journal.pone.0233640.g001>

AUROMEDICS

NDC 55150-188-10

Tranexamic Acid Injection

1,000 mg per 10 mL (100 mg / mL)

For Intravenous Use Only

Rx only

10 mL sterile single-use vial

Each mL of the sterile aqueous solution for intravenous injection contains tranexamic acid USP 100 mg.

Usual Dosage: See accompanying prescribing information.

Store at 20° to 25°C (68° to 77°F). [See USP Controlled Room Temperature.]

Discard unused portion.

Manufactured for: **AuroMedics Pharma LLC**
6 Wheeling Road, Dayton, NJ 08810

Manufactured by: **Aurobindo Pharma Limited**
IDA, Pashamylaram - 502307, India

M.L.No.: 13/ND/AP/2010/FCC

P1410388

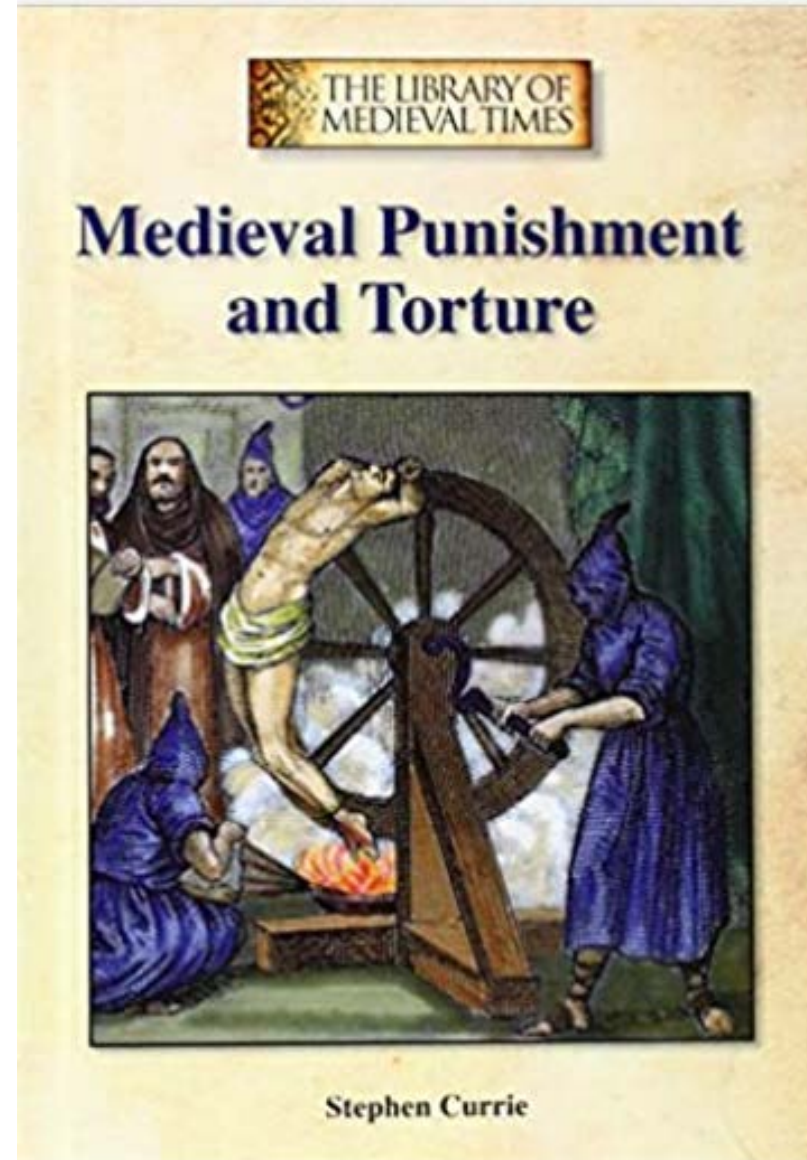


55150-188-10-9

LOT

EXP

Nasal Packing





Methods

Results



- 63% Less likely to return
- 3.5 X increased likelihood of bleed cessation

Recommendations



Yoga for Headache?

- Anheyer D, Klose P, Lauche R, Saha FJ, Cramer H. Yoga for Treating Headaches: a Systematic Review and Meta-analysis. J Gen Intern Med. 2020 Mar;35(3):846-854. doi: 10.1007/s11606-019-05413-9. Epub 2019 Oct 30. PMID: 31667736; PMCID: PMC7080891.



Methods



Results



Recommendations



Nebulized Ketamine

- Dove D, Fassassi C, Davis A, Drapkin J, Butt M, Hossain R, Kabariti S, Likourezos A, Gohel A, Favale P, Silver M, Marshall J, Motov S. Comparison of Nebulized Ketamine at Three Different Dosing Regimens for Treating Painful Conditions in the Emergency Department: A Prospective, Randomized, Double-Blind Clinical Trial. *Ann Emerg Med*. 2021 Dec;78(6):779-787. doi: 10.1016/j.annemergmed.2021.04.031. Epub 2021 Jul 3. PMID: 34226073.



Methods



Results

Time (mins)	.75 mg/kg	1.0 mg/kg	1.5 mg/kg
Zero	8.7	8.6	8.7
30	5.8	5.2	6
60	4.7	4.4	4.6
90	4	4.4	3.7
120	3.7	3.4	3.6

Recommendations

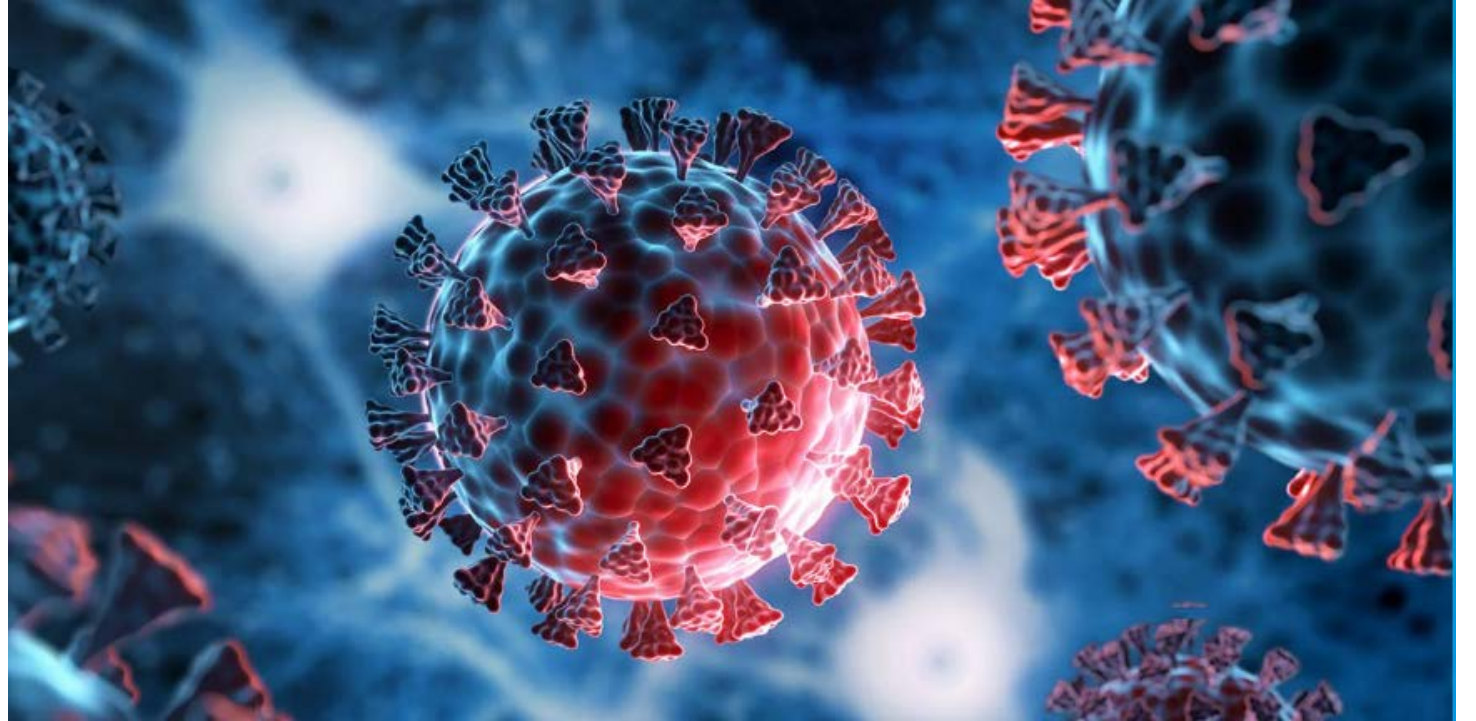


Does Paxlovid Work?

- Najjar-Debbiny R, Gronich N, Weber G, Khoury J, Amar M, Stein N, Goldstein LH, Saliba W. Effectiveness of Paxlovid in Reducing Severe COVID-19 and Mortality in High Risk Patients. Clin Infect Dis. 2022 Jun 2:ciac443. doi: 10.1093/cid/ciac443. Epub ahead of print. PMID: 35653428; PMCID: PMC9214014.



Methods



Results

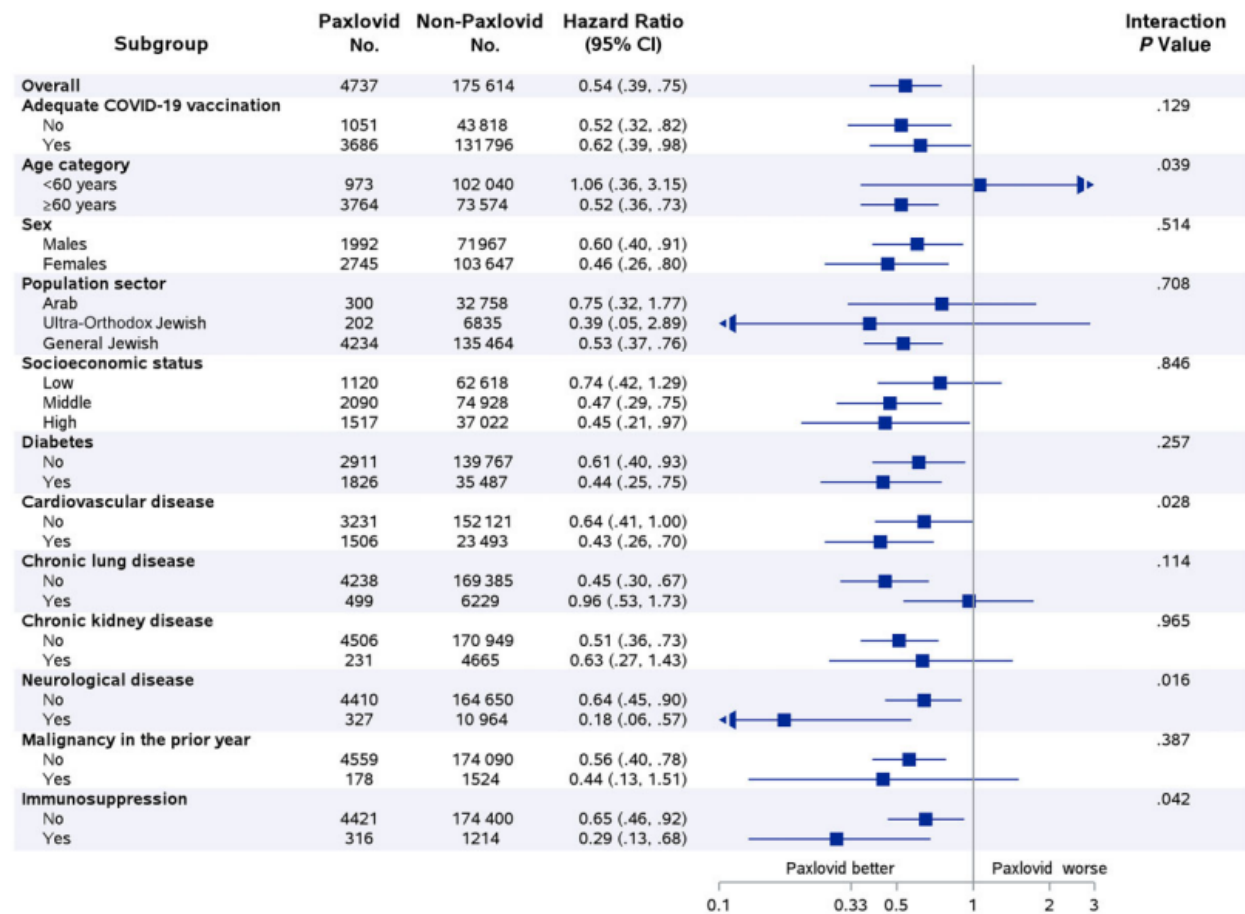


Figure 3. The effectiveness of Paxlovid in reducing the risk of severe coronavirus disease 2019 or mortality by subgroups of selected sociodemographic and clinical variables. *Selection of examined subgroups was based on variables that were retained in the multivariable Cox hazard regression analysis of the overall effect (Table 2). Abbreviations: CI, confidence interval; COVID-19, coronavirus disease 2019.

Test-to-Treat* can help you get tested for COVID-19 and, if appropriate, receive treatment all in the same location.

**This link will take you to a website that is owned and operated by HHS. Pfizer is not responsible for the content or services of this site.*

Find Locations

1-800-232-0233

FDA EUA Letter

Fact Sheets

Healthcare Provider Website

[USA, En]



Authorized Use

The FDA has authorized the emergency use of PAXLOVID, an investigational medicine, for the treatment of mild-to-moderate COVID-19 in adults and children (12 years of age and older weighing at least 88 pounds [40 kg]) with a positive test for the virus that causes COVID-19, and who are at high risk for progression to severe COVID-19, including hospitalization or death, under an EUA.

PAXLOVID is investigational because it is still being studied. There is limited information about the safety and effectiveness of using PAXLOVID to treat people with mild-to-moderate COVID-19.

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IMPORTANT SAFETY INFORMATION

Before taking PAXLOVID, tell your healthcare provider if you:

- Have any allergies

Expand +

Do not take PAXLOVID if:

- You are allergic to nirmatrelvir, ritonavir, or any of the ingredients in PAXLOVID.
- You are taking any of the following medicines:
 - Alfuzosin
 - Pethidine, propoxyphene
 - Ranolazine
 - Amiodarone, dronedarone, flecainide, propafenone, quinidine
 - Colchicine
 - Lurasidone, pimozide, clozapine
 - Dihydroergotamine, ergotamine, methylergonovine
 - Lovastatin, simvastatin
 - Sildenafil (Revatio[®]) for pulmonary arterial hypertension (PAH)
 - Triazolam, oral midazolam
 - Apalutamide
 - Carbamazepine, phenobarbital, phenytoin
 - Rifampin
 - St. John's Wort (*hypericum perforatum*)

Morning Dose

ritonavir tablet
(100 mg)

nirmatrelvir
tablet
(150 mg)



nirmatrelvir
tablet
(150 mg)

Take 3 tablets at the same time.

Evening Dose

ritonavir tablet
(100 mg)

nirmatrelvir
tablet
(150 mg)



nirmatrelvir
tablet
(150 mg)

Take 3 tablets at the same time.

Recommendations



PrePARE Trial

- Janz DR, Casey JD, Semler MW, Russell DW, Dargin J, Vonderhaar DJ, Dischert KM, West JR, Stempek S, Wozniak J, Caputo N, Heideman BE, Zouk AN, Gulati S, Stigler WS, Bentov I, Joffe AM, Rice TW; PrePARE Investigators; Pragmatic Critical Care Research Group. Effect of a fluid bolus on cardiovascular collapse among critically ill adults undergoing tracheal intubation (PrePARE): a randomised controlled trial. *Lancet Respir Med*. 2019 Dec;7(12):1039-1047. doi: 10.1016/S2213-2600(19)30246-2. Epub 2019 Oct 1. PMID: 31585796; PMCID: PMC8852295.



Methods



Results

	Fluids	No fluids
N	168	169
Collapse	33 (20%)	31 (18%)
No collapse	135 (80%)	138 (82%)



Recommendation



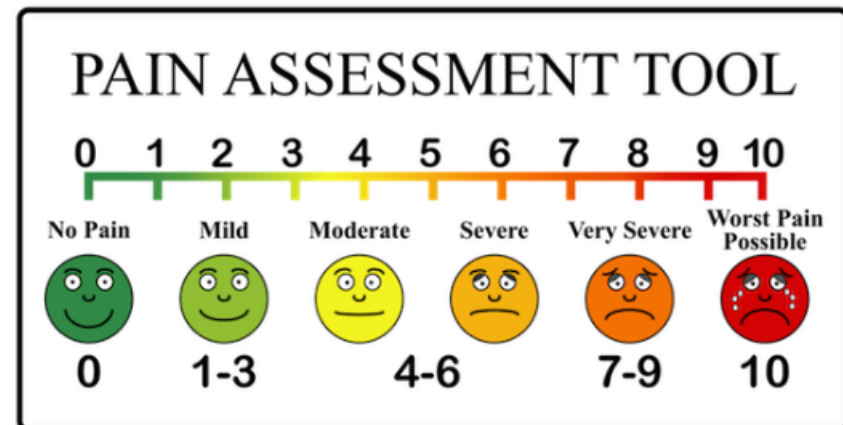


Digital Blocks: A Better Way?

- Selvi F, Bedel C, Akçimen M. Evaluation of vapocoolant spray effect on pain reduction during digital nerve block: A randomized clinical trial. *Am J Emerg Med.* 2021 Dec;50:260-263. doi: 10.1016/j.ajem.2021.08.001. Epub 2021 Aug 6. PMID: 34418716.

Results

	Control	Intervention 1	Intervention 2
Pre procedure	7.54	6.96	6.38
Penetration	6.34	5.86	2.34
Injection	6.44	1.9	1.84



Recommendation

When life hands
you lemons,
tuck 'em in your bra.

Can't hurt.

Might help.

som_{ee}cards
user card



High flow NC during intubation?

- Chua MT, Khan FA, Ng WM, Lu Q, Low MJW, Yau YW, Punyadasa A, Kuan WS. Pre- and Apnoeic high flow oxygenation for RApid sequence intubation in The Emergency department (Pre-AeRATE): study protocol for a multicentre, randomised controlled trial. *Trials*. 2019 Apr 4;20(1):195. doi: 10.1186/s13063-019-3305-8. PMID: 30947740; PMCID: PMC6449991.

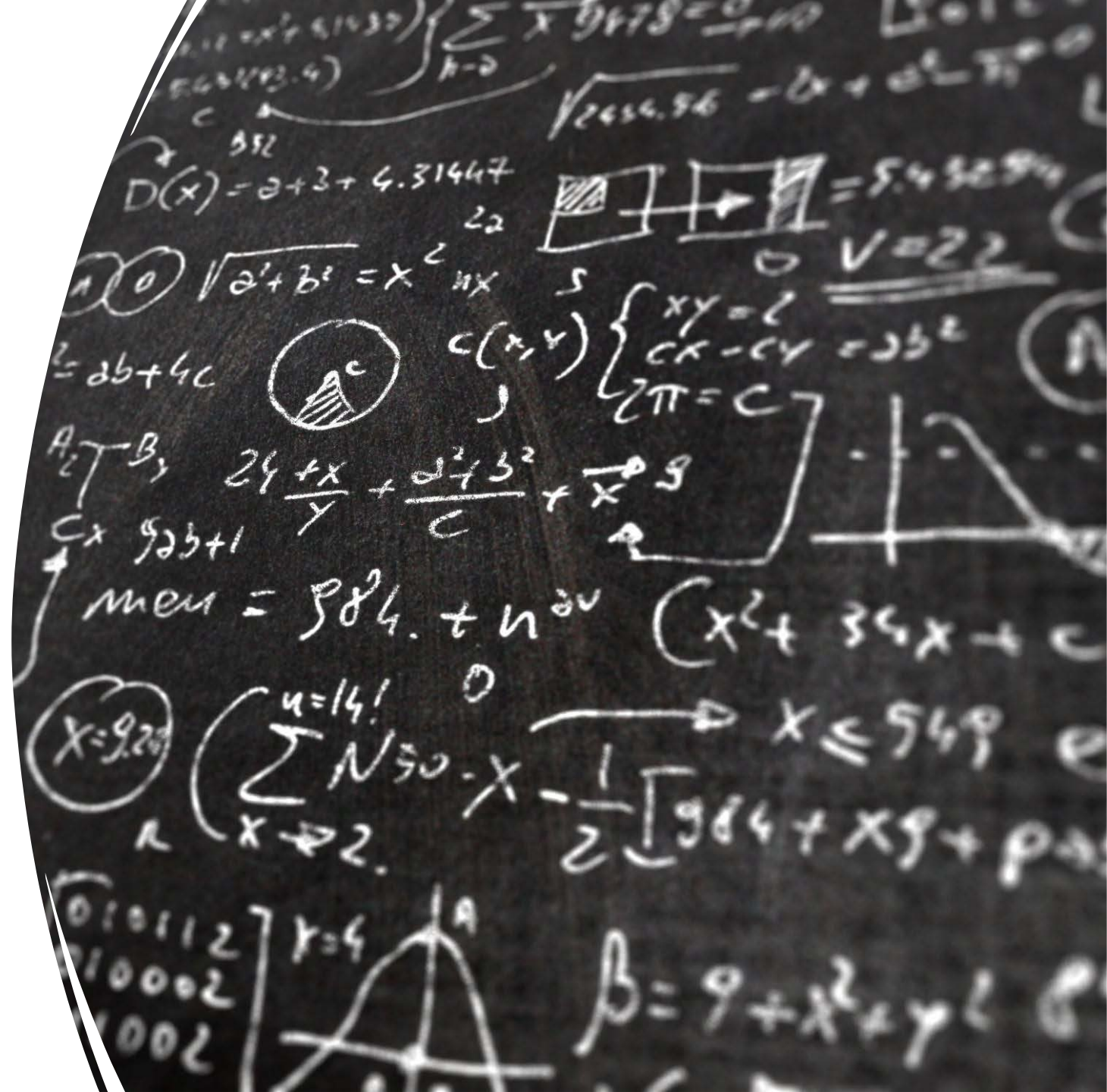
Hi-VNI[®] Technology

PRECISION FLOW Hi-VNI™

QUICK REFERENCE GUIDE



Methods



Results



Recommendations



Back Pain and Muscle Relaxers

- Abril L, Zamora C, Cordero M, Williams AR, Friedman BW. The Relative Efficacy of Seven Skeletal Muscle Relaxants. An Analysis of Data From Randomized Studies. *J Emerg Med*. 2022 Apr;62(4):455-461. doi: 10.1016/j.jemermed.2021.09.025. Epub 2022 Jan 20. PMID: 35067395.



Methods



Results



Muscle Relaxant	Change in RMDQ	No or Mild Pain	Adverse Reactions
Placebo	10.5	65	16
Baclofen	10.6	67	10
Metaxalone	10.3	63	9
Tizanidine	11.5	68	8
Diazepam	11.1	68	21
Orphenadrine	9.5	67	9
Methocarbamol	8.1	61	19
Cyclobenzaprine	10.1	60	35

Recommendations



Urine pH and UTI

- Sheele JM, Libertin CR, Fink I, Jensen T, Dasalla N, Lyon TD. Alkaline Urine in the Emergency Department Predicts Nitrofurantoin Resistance. *J Emerg Med.* 2022 Mar;62(3):368-377. doi: 10.1016/j.jemermed.2021.10.022. Epub 2022 Jan 6. PMID: 35000812.



Methods



Results

	5-7	8	9
Nitrofurantoin	80.4	69.5	54.6
Cefazolin	80.8	78.5	78.7
Ciprofloxacin	73.7	70.4	63.5
TMP-SMX	77.5	76.1	70.2

Recommendations



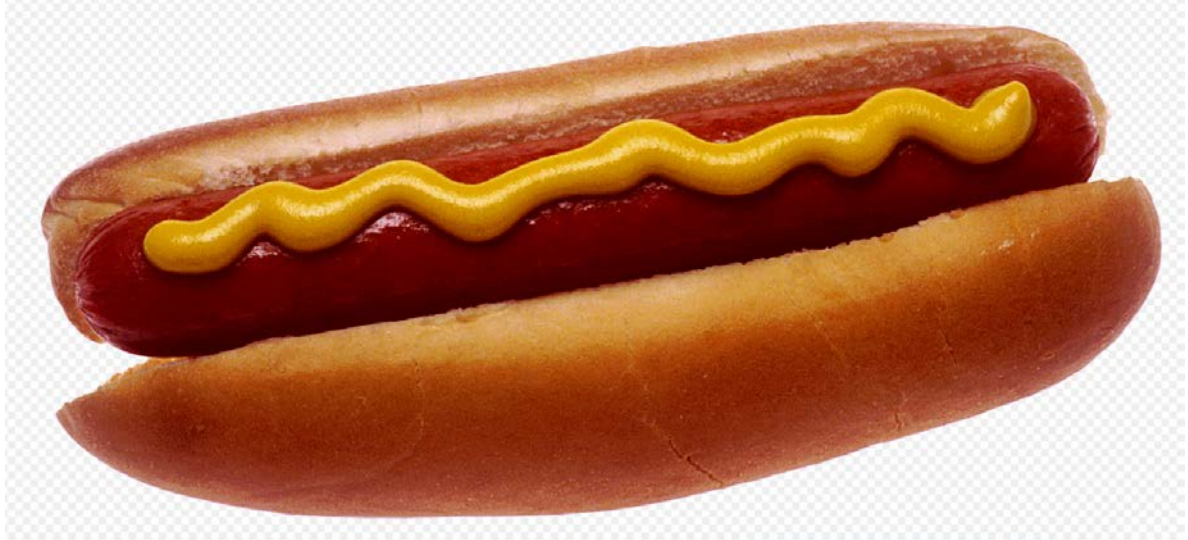


Avoid the Fire

- Blereau C, Radloff S, Grisham J. Up in Flames: The Safety of Electrocautery Trephination of Subungual Hematomas with Acrylic Nails. West J Emerg Med. 2022 Feb 23;23(2):183-185. doi: 10.5811/westjem.2021.10.53567. PMID: 35302451; PMCID: PMC8967465.



Methods



Results

N=200	Ignite	No Ignite
Absolute	83	117
Percentage	41.5	58.5

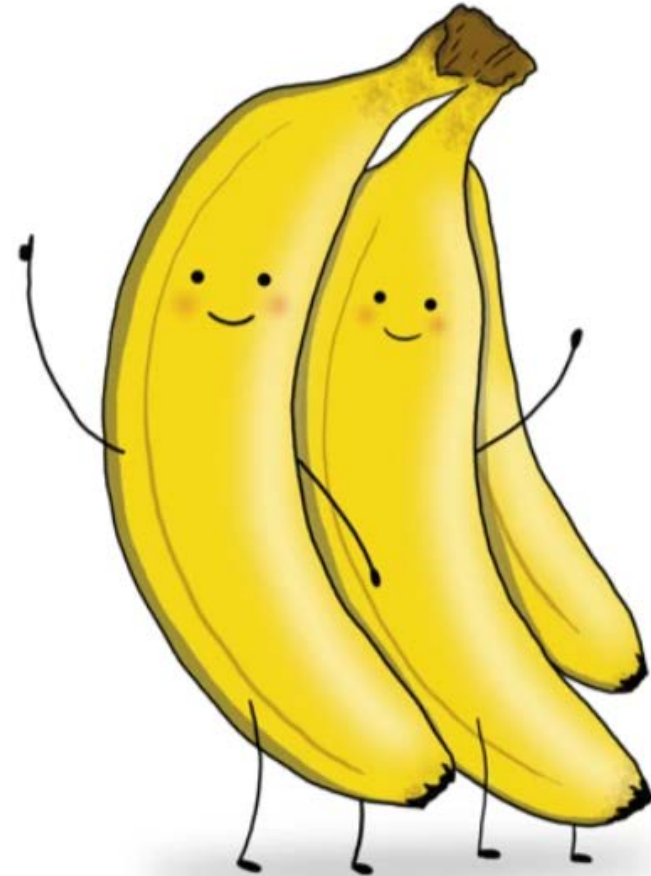


A dramatic night scene of a large fire at a building. A firefighter in the foreground is spraying water from a hose onto the burning structure. Thick smoke and bright orange flames are visible against the dark sky. The overall color palette is dominated by warm, fiery tones of orange, yellow, and black.

Recommendation

Don't ignite your patients.

THANKS A BUNCH!



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