



FOAM & Education Newsletter

March 2021
Volume #7



Welcome to Rez's #FOAM Newsletter

This is a monthly newsletter brought to you by the Education Committee with the latest in the EM & FOAMed world, ranging from trials, news and pearls. We will also share with you the best podcasts & blog posts recently published in FOAM. If you have an interest in contributing or sharing interesting images or EKGs, let us know!



Critical Care Update: the HOT-ICU Trial

POCUS for Shoulder Dislocations?



March FOAM Highlights

Podcast of The Month:
Febrile Podcast: Adventures From STI Clinic

Blog Post of The Month:
EmDocs: Anorectal Abscesses

Procedure of The Month:
EmCrit: Cricothyrotomy (Video 1, Video 2, Video 3)

Your 20-21 Education Committee
Walid Malki
Jon Reid
Lola Reingold
TJ Stolz
Yalan Vu

Critical Care Update by Walid: The HOT-ICU Trial - Lower vs Higher Oxygenation Targets for AHRF.

Bottom Line: No significant effect on 90-day mortality between the lower-oxygenation (PaO₂ 60 mmHg) & higher-oxygenation (PaO₂ 90 mmHg) groups.

How: Multi-center, stratified, parallel-group randomized control trial.

Who: n=2888, >18yo within 12hrs of admission to the ICU with AHRF receiving at least 10L/min O₂ in open system or FiO₂ >50% in closed system.

Goal PaO₂: Lower oxygenation group target PaO₂ 60 mmHg vs higher oxygenation group PaO₂ 90 mmHg

Results: 42.9% in the lower-oxygenation group died compared to 42.4% in the higher-oxygenation group. No significant difference in percentage of patients alive without life support after 90 days or in percentage of days alive after discharge.

Limitations: High mortality rate due to degree of severity of hypoxemia, possible differences in treatment effects among different ICUs, not be generalizable to patients with acute brain injury or neurologic illness

Source: Schjørring OL, Klitgaard TL, Perner A, et al. Lower or Higher Oxygenation Targets for Acute Hypoxemic Respiratory Failure. *N Engl J Med*. January 2021. Doi: 10.1056/NEJMoa2032510.

POCUS Update: Can a Posterior Approach to Shoulder POCUS Replace XR to Diagnose Shoulder Dislocation? By Yalan

What: Multiple publications, including systematic reviews, have shown US can be used to diagnose shoulder dislocations, but it will take time before many EM physicians (and our ortho consultants) become comfortable with choosing ultrasound over the standard XR. Nonetheless, here is a posterior approach to shoulder ultrasonography and how it measures up compared to XR.

Why: Easy to do, sensitivity for detecting dislocation: 100% & specificity for detecting dislocation: 100%

POCUS Approach: Position patient sitting up or left lateral decubitus & place probe in transverse position under the spine of scapula, with indicator pointed toward patient's left. Slide laterally to the scapular notch & assess distance of humeral head from glenoid. Can also look for cortical dislocation to assess for fractures.

Video Link: [5-minute Sono on anterior & posterior shoulder dislocations](#)

Marijuana-related ED visits pre and post-legalization in Canada by Lola

Bottom Line: Legalization of marijuana did not increase # ED visits or rates of admission related to marijuana use

How: Retrospective study reviewing all cannabis-related ED visits 6 months pre- and post-legalization of recreational marijuana in Canada.

Who: 64,152 visits during the 12 months of the study, of which 358 involved cannabis in ICD-10. Median age 27, 68% male.

Findings:

- No difference in the overall number of cannabis-associated visits (2.44 vs 2.94 visits per 1000 ED visits, p = 0.27)
- Significant increase in visits in the 18-29 age group (56% increase, p=0.03)
- Compared to pre-legalization, post-legalization ED visits were significantly more likely to be observation-only (48% vs 25%, p = 0.002) but less likely to lead to bloodwork (53% vs 12%, p<0.05) or imaging (29% vs 2%, p<0.05)
- No changes in rates of admissions or LOS

Limitations: No pediatric data captured in this study.

Source: Baraniecki, R., Panchal, P., Malhotra, D. D., Aliferis, A., & Zia, Z. (2021). Acute cannabis intoxication in the emergency department: the effect of legalization. *BMC Emergency Medicine*, 21(1), 32. <https://doi.org/10.1186/s12873-021-00428-0>