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What The Hell Has
BROWN Been Reading
JOURNAL ARTICLES
2/2025

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- ### Ten Commandments Of Emergency Medicine
- ▶ Secure the ABCs, but carefully
 - ▶ Remember Naloxone, Glucose, and Thiamine
 - ▶ Administer a Pregnancy Test and sometimes a Bedside US
 - ▶ Assume the Worst
 - ▶ Do Not Send Unstable Patients to Radiology and Never Alone
 - ▶ Seek Out the Red Flags
 - ▶ Trust No One, Believe Nothing including yourself
 - ▶ Learn From Your Mistakes
 - ▶ Do Unto Others As You Would Your Family
 - ▶ When in Doubt, Always ERR on the Side of the Patient

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Emerging Tick Bite-Associated Meat Allergy Potentially Affects Thousands
CDC press release 7/27/2023

- ▶ Alpha-gal syndrome = red-meat allergy = tick bite allergy
- ▶ 2010-2022 >110,000 suspected cases of alpha-gal syndrome
- ▶ Estimated 450,000 affected
- ▶ Alpha-gal is a sugar found in mammal meats and products
- ▶ <1/2 of physicians have heard of AGS
- ▶ Lone Star Tick- southern, midwestern and mid Atlantic US
- ▶ Usually within 2-6 hours-Hives, rash, N/V/D, heartburn, SOB, hypotension, swelling of lips and throat, etc.
- ▶ Dx blood test for antibodies specific to alpha gal
- ▶ ****In general, infected ticks must be attached for more than 24 hours to transmit infection; prompt tick removal can prevent transmission. CDC website**

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Lone Star Tick

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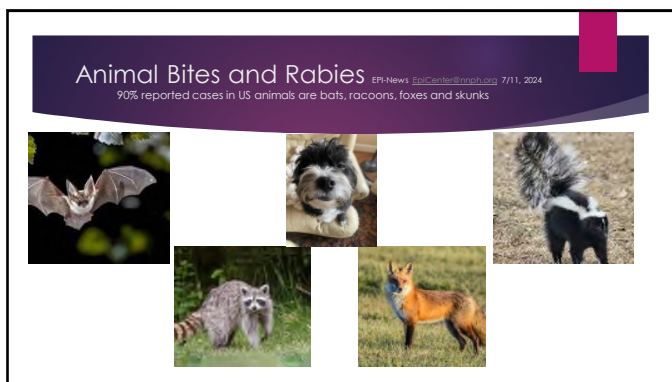
Evidence Mounting for the Green Whistle
Emergency Medicine News vol 46 8/24

- ▶ Inhaled Pain Management in ED and EMS
- ▶ Pentrox-inhaled methoxyflurane a volatile anesthetic agent
- ▶ Not in US but +Canada, Asia, New Zealand, Europe
- ▶ Benefits: Rapid onset-3 minutes, Ease of administration, versatility, patient satisfaction, minimal impact on respiratory and cardiovascular system
- ▶ Adverse Effects: increased dizziness and headaches. Less effective than IV morphine and fentanyl. At higher than whistle doses can cause kidney damage or toxicity.
- ▶ Cost- UK \$23

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Rabies

- ▶ Encephalitic disease caused by Lyssaviruses and untreated is always **FATAL**
- ▶ Broken skin and the saliva, mucus, or brain matter usually from bite or open wound or scratch
- ▶ Symptoms occur days, weeks, months or even years after exposure
- ▶ ~55,000 deaths/year worldwide US 10 deaths/year
- ▶ Increase risk with travel outside US and outdoor activities
- ▶ S&S if present: mirror flu-weakness, fever, headache, confusion, fear of water, seizures, partial paralysis, coma → **DEATH 100%**
- ▶ Treatment- 10 day observation or euthanize animal OR HRIG + 4 more doses

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West Nile Virus

Flavivirus spread by mosquitoes (Culex species) to humans after feeding on birds

People are dead-end hosts (very rare person to person) but blood and organ donations and mom to baby happen

70-80% are subclinical

S&S acute febrile illness, headache, myalgias, GI, weakness, <1% develop neurovascular illness like meningitis, encephalitis or acute flaccid myelitis and seizures

Lab/Radiology blood non-specific MRI = frequently normal CSF = lymphocytic pleocytosis

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West Nile Virus

OUTCOME Fatality = 10% If recover from WNV encephalitis = weeks to months of fatigue, malaise weakness If recovery ? Lifelong immunity

PREVENTION is KEY NO vaccines or medications prevent WNV

Current cases 1/1/2024-10/1/2024 total cases 880 Neuroinvasive 605

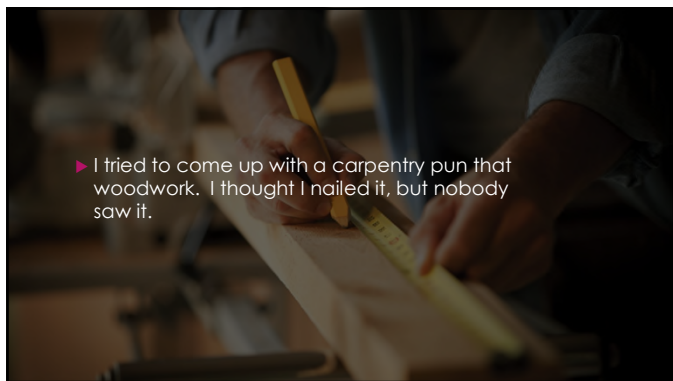
WNV is in Washoe County and Nevada

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Nirmatrelvir-Ritonavir as Postexposure Prophylaxis for Covid-19 NEJM 7/18/24

- ▶ N 2736 1/2 received drug tx either 5 or 10 days 1/2 received placebo
- ▶ End point 14 days after randomization
- ▶ 90% of participants were seropositive at baseline
- ▶ NO statistical difference between groups
- ▶ Transmission 5 day rx = 2.5% 10 day rx = 2.4% Placebo = 3.9%
- ▶ Adverse drug events 6% with Dysgeusia (altered sense of taste) common
- ▶ Conclusion: incidence of household transmission is low postexposure prophylaxis did NOT lower risk

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▶ I tried to come up with a carpentry pun that involved woodwork. I thought I nailed it, but nobody saw it.

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Increased risk of major adverse cardiac and cerebral vascular events in elderly non-smokers who use cannabis.
Paper Abstract #107249 Data from 2017 National Inpatient Sample as reported at AMA Scientific Sessions 2022

- ▶ N 28,535 Cannabis users with cardiovascular risk factors; HTN, Type 2 DM or High Cholesterol. Hospitalized patients age 65+.
- ▶ Comparison group 10,680,000 same risk factors NO Cannabis.
- ▶ 13.9% increase of major adverse heart or brain events in hospital.
- ▶ Higher rate 7.6% vs 6% heart attacks
- ▶ Higher rate 28.9% vs 19% of being transferred to other facilities.
- ▶ Cannabis appears to increase cardiovascular risk in older adults.

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Blood pressure lowering reduces dementia risk
MDedge 11/2023 China Rural Hypertension Control Project (CRHCP)

- ▶ Global Dementia: 2019=57.4 million Projected to be 152 million by 2050.
- ▶ N 33,995 325 villages in China Age 40+ with untreated HTN
- ▶ Group A SBP 157->127 Group B SBP 155->147
- ▶ 48 month follow up average age 63yrs
- ▶ Significant differences of **15%** in outcome of all cause dementia A>>B.

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Rethinking Limb Tourniquet Conversion in the Prehospital Environment.

Trauma Acute Care Surg vol 95 # 6 2023

- ▶ Review of current recommendations.
- ▶ TQ < 2 hours safe
- ▶ TQ > 2 hours risk of ischemic injury
- ▶ TQ < 6 hours attempt TC or TR
- ▶ TQ > 6 hours leave in place increase risk of amputation
- ▶ TC= tourniquet conversion-replacement with hemostatic pressure
- ▶ TR = tourniquet replacement-exchange "high and tight" ~ 2-3 inches above bleeding site

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Tactical Combat Casualty Care

Myths

All Tourniquets should be applied "High & Tight"

Once a tourniquet is applied, leave it alone

Tourniquets can only be removed or converted by a surgeon.

VS

Facts

"High & Tight" tourniquets are recommended in Care when the location is difficult to identify, the location of the bleeding is known.

Research-based tourniquets should be necessary in TCCC to allow for conversion and removal.

Tourniquets should be removed and other properly placed on the limb or converted to a hemostatic pressure bandage by those trained to do so.

JOURNAL OF TRAUMA AND ACUTE CARE SURGERY
www.jtrauma.com

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Reasons to Convert or Replace Tourniquets

Limb preservation	Prolonged tourniquet use can lead to ischemia and tissue damage, increasing the risk of limb loss.
Prevention of compartment syndrome	Prolonged tourniquet application can lead to the development of compartment syndrome, a condition characterized by increased pressure within a muscle compartment, resulting in tissue damage and potential loss of limb function.
Prevention of reperfusion injury	When a tourniquet is released after prolonged use, reperfusion of the limb can lead to systemic complications such as acidosis, coagulopathy, hypothermia, renal failure, and death.
Avoidance of prolonged pain and discomfort	Prolonged tourniquet application can cause significant pain and discomfort to the casualty and can increase the need for analgesic medications in a limited resource environment.

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COLD DAY IN HELL BEFORE I TOUCH THAT TOURNIQUET



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Coming in Hot: Police transport and prehospital time after firearm injury. J of Trauma and acute Care surgery 11/2022 Vol 93 5

- ▶ Retrospective Study: Open data Philly shooting Victims Adults 2015-2018
- ▶ Police Transported N 977 EMS Transported 320
- ▶ Prehospital times: Police-mean 9 minutes << EMS-mean 21 minutes
- ▶ Police transported pts often more severely injured, Trauma score 60% vs 50%
- ▶ Unexpected Survivors at 6 hours Police 6% > EMS 2%
- ▶ Unexpected Survivors at 24 hours Police 3% > EMS 1%
- ▶ Conclusion: Ongoing opportunity to optimize in hospital care.

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Physician-staffed ambulance and increased in-hospital mortality of hypotensive trauma patients following prolonged prehospital stay: A nationwide study. J of Trauma and Acute Care 8(2) Vol 91

- ▶ Retrospective cohort study Japan Trauma Data Bank 2004-2019
- ▶ Hypotensive trauma Pts SBP<90 Transported by ambulance
- ▶ Physician staffed (resuscitative procedures) VS ALS
- ▶ N 12,652 738 physician staffed transports
- ▶ In hospital mortality and prehospital time to hospital arrival were studied

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RESULTS

- ▶ In hospital mortality was higher in physician-staffed ambulances
- ▶ 28% VS 17.5%
- ▶ Longer prehospital times for physician staffed ambulances
- ▶ 50 minutes VS 37 minutes

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Suicide attempt in the terminally ill cancer patient with advanced directive. ACEP NOW 12/2023

- ▶ Pt is male with Methadone OD suicide attempt. Unconscious
- ▶ Recent hospitalization for severe cancer pain from squamous cell ca with extensive metastasis.
- ▶ EMS gave naloxone now somnolent
- ▶ POLST states comfort measures only

- ▶ NOW WHAT DO YOU DO

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- ▶ This author states: You can NOT withhold resuscitative efforts.
- ▶ Suicide is not considered a rational choice.
- ▶ The POLST holds no legal authority in this situation.
- ▶ POLST was created in regards to his terminal illness NOT his SA.
- ▶ EPs are legally and morally obligated to resuscitate all patients after SA.

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Attempted suicide in the elderly with existing DNRs: an emerging geriatric ethical dilemma Census online 1/2021 13(1)

- ▶ 93 yrs male with advanced dementia and 92 yrs female
- ▶ Suicide Pact and attempt death by overdose and cutting wrists
- ▶ Both survive
- ▶ Both have DNRs
- ▶ Your Thoughts

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Complicating Circumstances

- ▶ Both Stabilized
- ▶ Male had DNR from prior SA and NO current terminal illness.
- ▶ He did NOT meet Hospice criteria for illness.
- ▶ She did NOT want to die but went along with his request.

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