

ABSTRACTS IN URGENT CARE

Cannabis Use and Cardiovascular Outcomes in Adults

Take Home Point: This study suggests that cannabis use has a strong, statistically significant association with adverse cardiovascular outcomes independent of tobacco use.

Citation: Jeffers A, Glantz S, Byers A, et. al. Association of Cannabis Use With Cardiovascular Outcomes Among US Adults. *J Am Heart Assoc*. 2024 5;13(5):e030178. doi: 10.1161/JAHA.123.030178

Relevance: Animal studies have previously shown endothelial cell dysfunction, a precursor to endovascular disease, occurs with cannabis use. However, with increased cannabis use in recent years, it is unknown if a correlation exists between cannabis use and cardiovascular outcomes.

Study Summary: This was a population-based, cross-sectional study of data from the Behavioral Risk Factor Surveillance Survey from 27 American states and 2 territories. The authors quantified cannabis use as a continuous variable, (days of cannabis use in the previous 30 days divided by 30). Analysis included multiple demographic variables, socioeconomic variables, and cardiovascular risk factors. Multivariable logistic analyses examined use of cannabis with lifetime occurrence of coronary heart disease (CHD), myocardial infarction (MI), stroke, and the composite of the 3 with cannabis use.

The authors identified 434,104 respondents who answered the cannabis module questions and found prevalence of daily cannabis use was 4.0%, nondaily use was 7.1% (median: 5 days per month; interquartile range, 2–14), and nonuse was 88.9%. They found 30-day cannabis use was statistically significantly associated with MI, stroke, and composite outcomes of CHD, MI, and stroke; controlling for tobacco use status, age, sex, race and ethnicity, body mass index, diabetes, alcohol use, educational



Ivan Koay, MBChB, MRCS, FCUCM, FRNZCUC, MD, is an urgent care physician and the Medical Lead for Kings College Hospital Urgent Treatment Centre, London, England, and Watford General Hospital Urgent Treatment Centre, Watford, United Kingdom. He is also the Convener for reland and UK Faculty for the Royal New Zealand College of Urgent Care, as well as the London Representative of Faculty of Pre-Hospital Care for the Royal College of Surgeons, Edinburgh, Scotland.

attainment, and physical activity. Additionally, there was a dose-response relationship with more days of use associated with higher risks.

Editor's Comments: The study was limited by its crosssectional design, which provides only a snapshot of the timeframe studied, making it difficult to track change in behavior and long-term effects. Participant self-reporting makes the results susceptible to recall bias. However, the large number of participants allowed the authors to provide a subset analysis of participants who never used tobacco indicating that cannabis use is potentially an independent risk factor for poor cardiovascular outcomes. Although further research is necessary to substantiate this association, this study represents the first instance in which such conclusions have been drawn. For urgent care (UC) clinicians, regular screening questions regarding cannabis use might be appropriate when assessing patients presenting with symptoms concerning for acute coronary syndrome or stroke.

Do All Facial Fractures Require Emergency Department Transfers? Defining Criteria for Referrals

Take Home Point: In this study, more than half of patients with isolated facial fractures did not require immediately surgical intervention or hospitalization.

Citation: Castillo Diaz F, Anand T, Khurshid M, et. al. Look me in the face and tell me that I needed to be transferred: Defining the criteria for transferring patients with isolated facial injuries. *J Trauma Acute Care Surg.* 2025 May 9. doi: 10.1097/TA.0000000000004651.

Relevance: Facial trauma is a common presentation to both emergency department (ED) and UC settings with a large proportion of patients referred on for specialist evaluation. However, many of these patients do not have further intervention, and the authors of this study reviewed facial trauma cases and outcomes to develop facial injury guidelines to help clinicians determine transfer needs.

Study Summary: This was a retrospective analysis of data from patients transferred to a level 1 trauma center in Ari-

zona, USA, with craniomaxillofacial trauma over a 5-year period. Data for patients ≥18 years of age who were transferred to the facility for evaluation and/or management of isolated facial injuries were reviewed based on outcome and by a panel of experts. The primary objective of this study was to develop the facial injury guidelines (FIG), an evidence-based algorithm to standardize interfacility transfers for facial trauma.

The authors identified 511 patients for review. They noted that 252 (49%) were classified as appropriate transfers, while 259 (51%) were potentially inappropriate transfers. The FIG that the authors developed suggests that patients with isolated zygomatic arch fractures, nasal bone fractures, maxillary sinus fractures, Le Fort type 1 injuries, hard palate fractures, and maxillary alveolus fractures do not require transfer. None of the 247 patients with these injuries required intervention at the time of transfer, and all were discharged home. Although, 26 patients subsequently did require surgical intervention indicating that outpatient follow-up is still recomended. None of the patients with delayed intervention had significant complications due to the delay in management.

Editor's Comments: Limitations of this study include the authors' inability to assess those patients who required transfer but were not and the exclusion of patients who were transferred for cosmetic and aesthetic reasons. Local guidelines and specialist preferences may also vary and therefore incorporating the Facial Injury Guidelines into urgent care practice need to be tailored accordingly.

Does a Negative Chest X-Ray Rule Out Pneumonia in Children?

Take Home Point: In pediatric patients with suspected pneumonia, the development of pneumonia following a negative chest x-ray (CXR) was rare. However, the authors do recommend caution on performing CXR for all children.

Citation: Hirsch A, Wagner A, Lipsett S, et. al. Risk of Subsequent Pneumonia After a Negative Chest Radiograph in the ED. *Pediatrics*. 2025;155(5):e2024069829

Relevance: There has been concern that radiographic features of pneumonia lag behind clinical findings; therefore, raising doubt on the reliance of plain chest x-rays (CXR) to diagnose pneumonia in children presenting to emergency departments (ED).

Study Summary: This was a retrospective cohort study in a large US tertiary pediatric ED over a 10-year period (2012-2021) to determine the percentage of children with suspected pneumonia who developed radiographic pneumonia after an initial negative CXR. The authors reviewed medical records of patients presenting with fever or respiratory symptoms who had CXR to evaluate for pneumonia with repeat imaging within 14 days of the initial visit.

The authors identified 9,957 children with negative initial CXRs, among whom 240 (2.4%) underwent a repeat CXR within 14 days. Of the 240 children with a follow-up CXR, only 27 children (11.3%) developed radiographic pneumonia. This equated to 0.27% of all children with an initially negative CXR. The children that subsequently developed pneumonia after initial negative CXR were more likely to have tachypnea on initial presentation. There were no other differences in clinical or demographic characteristics. As such, CXR during the initial visit had a negative predictive value of 99.7%.

Editor's Comments: It is critical to remember that the Infectious Diseases Society of America (IDSA) recommends against the routine use of CXR to diagnose pneumonia in pediatric patients in the outpatient setting. This is due to concerns with radiation exposure and the difficulty in distinguishing viral from bacterial infections. For many urgent care clinics, the lack of radiography technicians may also limit availability. However, this study was based in an institution that utilized CXR as part of the diagnostic pathway for suspected pneumonia with very few patients not receiving a CXR. Therefore, UC clinicians who choose to perform a CXR on a pediatric patient with suspected pneumonia can feel confident with a negative CXR.

Safer Treatment of Urinary Tract Infections in the First **Trimester of Pregnancy**

Take Home Point: First trimester of pregnancy exposure to trimethoprim-sulfamethoxazole (TMP-SMX) is associated with increased risk of any congenital malformation, severe cardiac malformation, other cardiac malformation, and cleft lip and palate compared with β -lactam exposure.

Citation: Osmundson S, Nickel K, Shortreed S, et. al. First-Trimester Antibiotic Use for Urinary Tract Infection and Risk of Congenital Malformations. JAMA Netw Open. 2025 Jul 1;8(7):e2519544. doi: 10.1001/jamanetworkopen.2025. 19544.

Relevance: Urinary tract infections (UTI) are common in pregnancy and treatment is indicated to prevent negative maternal and neonatal outcomes. However present guidance regarding appropriate antibiotics is vague due to uncertainty regarding risks of congenital malformations associated with the most commonly prescribed antibiotics.

Study Summary: This was a population-based cohort study of commercially insured pregnant individuals who were treated for UTI in the Merative Market Scan Commercial Database. Congenital malformations were identified using the Kharbanda algorithm to review inpatient and outpatient diagnosis codes on birthing parent claims for the first month after delivery and infant claims up to 365 days

The authors identified 71,604 pregnancies to review. Of these, 42,402 individuals (59.2%) had first-trimester exposure to nitrofurantoin; 3,494 (4.9%) had first-trimester exposure to TMP-SMX; 3,663 (5.1%) had first-trimester exposure to fluoroquinolones, and 22,045 (30.8%) had firsttrimester exposure to β-lactams. They found 1,518 infants with any congenital malformation, including 729 with cardiac malformations. In the analysis, first-trimester exposure to TMP-SMX was associated with increased risk of any congenital malformation (weighted RR, 1.35; 95%CI, 1.04 to 1.75, indicating 1 additional malformation per 145 pregnant individuals treated with TMP-SMX vs β-lactams). No elevated risk was found with nitrofurantoin.

Editor's Comments: The study design was subject to other potential confounders which were not factored into any of the results namely, genetic factors, obesity, tobacco use, alcohol use, substance use, and severity of infection. Additionally, the study's data was limited to only live births which has the potential of introducing selection bias. This study has also limited generalizability to Medicaid and uninsured populations. The findings point to preferred antibiotic choices in the treatment for UTI for patients in their first trimester of pregnancy. ■

Saline Irrigation for Acute **Sinusitis**

Take Home Point: In this pilot study, the use of hypertonic saline nasal irrigation with a delayed antibiotic prescription is deemed an acceptable management plan for patients presenting with acute sinusitis.

Citation: Venekamp R, Ainsworth B, Thomas T, et. al. Saline nasal irrigation for acute sinusitis (SNIFS II): a randomised controlled pilot trial with nested process evaluation. BJGP Open. 2025 Mar 31:BJGPO.2024.0307. doi: 10.3399/ BJGP0.2024.0307

Relevance: Acute sinusitis is a very common presentation to urgent care, where many patients have the expectation of treatment with antibiotics. Evidence shows antibiotics do not change recovery time, so finding alternative treatments can help both clinicians and patients.

Study Summary: This was an open label, individually randomized (1:1) controlled pilot trial with a nested process evaluation at 24 English general practices. Participants included those with sinus discomfort, and at least 2 of the following: patient-reported nasal obstruction, patient reported purulent nasal discharge, or pus seen in the nasal cavity by the clinician. Those in the intervention group were asked to irrigate the nose (150 ml through each nostril) using a SinuCleanse 19 nasal cup ("Netipot") daily for up to 21 days or until symptoms had resolved. Those in the control group were given usual care. Delayed prescriptions of penicillin V 500mg 4 times a day or alternatively amoxicillin 500mg 3 times a day for 1 week, or clarithromycin 500mg 2 times a day for 1 week (for penicillin allergy) were provided to all patients. The main clinical outcome of interest was patient-reported antibiotic consumption during 4-weeks follow-up.

In total, 81 participants were randomized: 42 to saline nasal irrigation; and 39 to usual care. Antibiotic use during 4-week follow-up was reported in 58% (19/33) of the saline group vs. 40% (12/30) of the usual care group and did not statistically significantly differ between groups in adjusted analysis (adjusted odds ratio: 0.81, 95% confidence interval [CI] 0.23 to 2.87). The mean symptom score on days 2-4 was 2.7 (standard deviation [SD] 1.3) in the saline nasal irrigation group and 3.0 (SD 1.1) in the usual care group. Repeat consultations with new, non-resolving, or worsening illness within 4 weeks occurred in 31% of the saline group vs. 50% of the usual care group (adjust odds ratio: 1.64, 95% CI 0.47 to 5.74). Semi-structured interviews with trial participants revealed that most were positive about trial participation and viewed saline nasal irrigation as acceptable, noting it as an alternative to antibiotics.

Editor's Comments: The study was not sufficiently powered to assess the clinical effectiveness of the intervention compared with usual care in terms of antibiotic use, duration and severity of symptoms, and associated cost. In patients presenting to urgent care with acute sinusitis and other upper respiratory tract illnesses, there are patient expectations regarding antibiotics that need to be acknowledged. Effectively communicating findings from this and similar studies demonstrating the non-antibiotic treatments for these diagnoses support antibiotic stewardship efforts.

Screening for Intimate Partner Violence and Caregiver Abuse

Take Home Point: The US Preventive Services Task Force (USPSTF) continues to recommend screening for intimate partner violence (IPV) in all women of reproductive age and provide interventions for women who screen positive either directly or via a referral process.

Citation: Feltner C, Peat C, Asher GN, et. al. Screening for Intimate Partner Violence and for Caregiver Abuse of Older or Vulnerable Adults: An Evidence Report and Systematic Review for the US Preventive Services Task Force. *JAMA*. 2025 Jul 22;334(4):339-355. doi:10.1001/jama.2025.2449

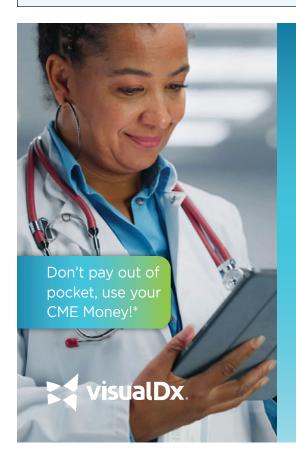
Relevance: IPV is an unrecognized issue which affects many worldwide. Nearly half of all U.S. adult women and men report experiencing sexual violence, physical violence, or stalking in their lifetime.

Study Summary: This was a literature review performed by the USPSTF to evaluate the benefits and harms of

screening for IPV, older adult abuse, and vulnerable adult abuse. The objective was to produce an updated recommendation statement. Screening for IPV generally involves a short questionnaire that assesses current or recent abuse. Included screening tools include the Humiliation, Afraid, Rape, Kick (HARK); the Hurt, Insult, Threaten, Scream (HITS); and the Woman Abuse Screening Tools (WAST).

The authors found no evidence on appropriate intervals for screening. The authors noted that effective interventions generally address the multiple factors related to IPV, involve ongoing support services, and provide a range of emotional support with behavioral and social services. In line with previous guidance, the authors recommend screening for IPV in all women of reproductive age, along with ongoing support for affected women where appropriate. Further work is required to ascertain the accuracy of current older and vulnerable adult abuse screening tools including the benefits and harms of screening as well as interventions to reduce this abuse.

Editor's Comments: This remains a complex issue for UC clinicians. However, this should not deter them from asking relevant questions when appropriate. In situations involving IPV, every encounter is significant, and UC engagement may bring previously unrecognized concerns to light. Even a brief screening can play a critical role in safeguarding patient well-being. ■



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