# **PACULit** JUNE NEWSLETTER

1 of 4

STUDY 1: COMPARISON OF THE EFFICACY OF OXYMETAZOLINE, TRANEXAMIC ACID, AND EPINEPHRINE-LIDOCAINE COMBINATION IN THE TREATMENT OF EPISTAXIS Authors: Tuna Çelik, Mustafa Altun, Emre Kudu, Mehmet Birkan Korgan, Oğuzhan Demir, Sinan Karacabey, Arzu Denizbasi, Erkman Sanri

Background: Epistaxis is a common emergency department (ED) presentation; optimal treatment remains debated.

Study Objective: Compare the effectiveness of oxymetazoline, tranexamic acid, and epinephrine-lidocaine combination in controlling epistaxis.

Study Design: Prospective, single-center, observational cohort study conducted in a tertiary ED (Feb 2022 – May 2024).

#### **Results:**

- 378 patients enrolled; 373 completed treatment.
- Direct pressure achieved hemostasis in 23.8%.
- Among 284 patients needing further intervention:
  - Oxymetazoline: 71% success
  - Tranexamic acid: 55% success
  - Epinephrine-lidocaine: 49% success
- Oxymetazoline was significantly more effective (p = 0.007).

# STUDY 2: SALBUTAMOL FOR ANALGESIA IN RENAL COLIC: A PROSPECTIVE. RANDOMISED. PLACEBO-CONTROLLED PHASE II TRIAL

Authors: Graham D Johnson, Andrew Tabner, Apostolos Fakis, Rachelle Sherman, Victoria Chester, Andrew Skeggs, Fran Game, Richard

• More adverse events in the salbutamol

group (65 vs. 42, p=0.02).

# STUDY 3: COMPARISON OF THE EFFECTS OF VAPOCOOLANT SPRAY AND TOPICAL ANAESTHETIC CREAM (LIDOCAINE-PRILOCAINE) ON PAIN OF INTRAVENOUS CANNULATION: A RANDOMISED CONTROLLED TRIAL

Atousa Authors: Akhgar, Amirreza Mazidabadi Farahani, Hamideh Akbari, Mojtaba Sedaghat, Mohammad Jalili, Hadi Mirfazaelian

**Background:** Intravenous (IV) cannulation pain is common. Both vapocoolant spray and lidocaine-prilocaine cream have shown efficacy in reducing cannulation pain.

Study Objective: Compare these two methods' effectiveness and tolerability.

Study Design: Randomised controlled trial at an academic hospital ED in Iran (Feb 2024 -May 2024).

## Intervention:

- Vapocoolant spray applied 30 s before IV cannulation.
- Lidocaine-prilocaine cream applied 45 min before cannulation.

### **Results:**

- 77 patients included; median age 39 years.
- Median pain scores:
  - Vapocoolant: 2 (IQR 2-3)
  - Lidocaine-prilocaine: 3 (IQR 2-3), p=0.09 (not statistically significant).
- Adverse events: 31% overall, mainly transient paleness in the cream group (p=0.03).
- Preference to use the same method again:
  - Vapocoolant: 43%

#### Cream: 27% (p=0.02). Jackson, Suzanne M Mason **Background:** Renal colic pain is severe, partly due to ureteral spasm. Salbutamol, a betaagonist, may relax ureteral smooth muscle. Study Objective: Assess whether salbutamol plus standard analgesia reduces pain more than standard analgesia alone. Study Design: Single-center, double-blind, randomised, placebo-controlled phase II trial in ED patients (≥18 years). Subscribe to Intervention: Patients received 250 µg IV PACULit Newsletter salbutamol or placebo in addition to for up-to-date information standard analgesia. **Results:** patients consented; • 151 108 with confirmed renal colic included in the primary analysis. No significant difference in median pain Watch the full score reduction at 30 min: video on Salbutamol: -18 mm YouTube Placebo: -13 mm • Difference: 5 mm (95% CI -16 to 6, p=0.575).