

IMPLEMENTATION OF A STANDARDIZED PEDIATRIC PROCEDURAL SEDATION PROTOCOL IN A TERTIARY EMERGENCY DEPARTMENT IN ITALY: A RETROSPECTIVE

CASE SERIES

SIMEU ID

Identificativo

1 2 3

M. Giglia – Dirigente Medico PS Ospedali Riuniti Padova Sud

Titolo

- S. Bravi Dirigente Medico PS Ospedali Riuniti Padova Sud
- G. Borio Dirigente Medico PS Ospedali Riuniti Padova Sud
- R. Volpin Direttore PS Ospedali Riuniti Padova Sud

Pediatric sedation practices in Italian emergency departments are often inconsistent, with significant variability in approach and quality of care. Recognizing this, the hospital developed a structured PPSA protocol in collaboration with orthopedic specialists. It is mandatory to ensure safer, more efficient, and more consistent care for children requiring procedural sedation in the ED.

8030 pediatric ED visits at "Ospedali Riuniti di

Padova Sud" in 2024

2281 trauma-related ED visits

20 patients with complex laceration repair, closed reductions of fractures or dislocations requiring procedural sedation.

Collection of patients clinical and demographic characteristics, information related to PSA: NPO time, monitoring, pharmacological strategies, patient's vital signs, incidence of AEs, PSA-related complications, length of stay in the ED.



PRIMARY OUTCOME

PSA-related major complications (e.g., unplanned intubation, or cardiac arrest)

SECONDARY OUTCOME

- ➤ Incidence of AEs classified as minimal, minor, and moderate according to current literature
- ➤ PSA success defined a priori as successful completion of the procedure in a minimally responsive subject.

A total of 20 patient were included: 12 males and 8 females, with an average age of 6.5 years (range: 3-15).

For <u>laceration repairs</u>, **oral midazolam (0.2–0.4 mg/kg)** was used in 9 cases; 1 patient received IV **ketamine for deeper sedation**.

For <u>orthopedic procedures</u>, **propofol (3–5 mg/kg)** was the primary agent in 8 cases, sometimes combined with fentanyl or midazolam.

No major complications were reported—no cases of oxygen desaturation, hypotension, intubation, or death. The target sedation level was achieved in all cases. **Average emergency department stay was 2 hours and 42 minutes**. 18 patients were discharged; 2 required admission for planned surgical intervention.

- > Procedural sedation performed by emergency physicians following a standardized protocol demonstrated efficacy and safety.
- > These findings support the implementation of protocol-driven sedation practices in emergency settings.
- ➤ Larger-scale studies aim to further assess safety, efficacy, and inform clinical guidelines is required.

Affiliazioni

Pronto Soccorso Ospedali Riuniti Padova Sud

Contatti _

marco.giglia@aulss6.veneto.it

RESEARCH ABSTRACT - Pediatric Procedural Sedation