

## REFERENCE

---

Grégoire C, De Kock M, Henrie J, Cren R, Lavand'homme P, Penalosa A, Verschuren F. Procedural Sedation With Dexmedetomidine in Combination With Ketamine in the Emergency Department. *J Emerg Med.* 2022 May 9:S0736-4679(22)00063-4. d

PMID: 35550843.

## SUMMARY

---

The combination of dexmedetomidine and ketamine provides conscious sedation, bringing comfort and pain relief to patients in optimal conditions for respiratory and hemodynamic safety. However, sedation and recovery times are longer than with conventional drug combinations. The dexmedetomidine-ketamine combination should therefore be recommended for nonurgent procedures and fragile patients.

## STUDY OBJECTIVE

---

- The aim was to evaluate the quality and safety of procedural sedation using the combination of dexmedetomidine and ketamine for patients undergoing painful procedures in the emergency department.

## STUDY DESIGN

---

- prospective interventional single-center study conducted in an academic emergency department of an urban hospital in Brussels, Belgium.

## STUDY INTERVENTION & COMPARISON

---

- bolus injection of 1 µg/kg dexmedetomidine over 10 min and then a continuous infusion of 0.6 µg/kg/h followed by a bolus of 1 mg/kg ketamine.

## RESULTS

---

- **Primary Outcome**
  - 90% of patients felt little or no pain (n = 29 of 30) or discomfort (n = 28 of 30) during the procedure.
- **Secondary Outcomes**
  - One patient experienced apnea with desaturation, which was resolved by a jaw-thrust maneuver.
  - 23% of patients had significant arterial hypertension, none required drug treatment.

## ADDITIONAL READINGS

---

- Godwin SA, Burton JH, Gerardo , et. al.: Clinical policy: procedural sedation and analgesia in the emergency department. *Ann Emerg Med* 2014; 63: pp. 247-258. e18
- Miller KA, Andolfatto G, Miner JR, et. al.: Clinical Practice Guideline for Emergency Department Procedural Sedation With Propofol: 2018 update. *Ann Emerg Med* 2019; 73: pp. 470-480.
- Jewett J, Phillips WJ.: Dexmedetomidine for procedural sedation in the emergency department. *Eur J Emerg Med* 2010; 17: pp. 60