2017-902 A NOVEL MIXTURE FOR INTRAVENOUS SEDATION

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Technology description

SUMMARY
UCLA researchers from the Department of Anesthesiology and Perioperative Medicine have developed a novel anesthetic mixture which combines anxielytic, narcotic, and sedation effects in a safe, effective solution.
BACKGROUND
The common practice of intravenous sedation for surgery is to administer several medications in different syringes to reduce anxiety (anxielytics), prevent pain associated with surgery (narcotics), provide continuous sedation (propofol) and prevent pain caused by propofol (lidocaine). It is very cumbersome to titrate all these medications simultaneously and the sedative effects on the patients are often unpredictable. These techniques are not only time consuming, but also unsafe since it is prone to over-sedation or under-sedation, leading to airway complications or injury if patients move during surgery.
INNOVATION
UCLA researchers have developed a novel technique to conduct intravenous sedation in a quantitatively controllable and predictable fashion. This new mixture offers several improvements over the conventional technique: the time to sedation is < 1 min, 90% of patients have no pain, and < 2% of patients require intervention for airway complications. Only a single syringe is required for the preparation and the sedation and analgesic result is greatly reproducible. This new mixture can also be made as a compound and delivered by infusion pump.

Application area

Anesthetic sedation

Advantages

Only one solution, one syringe needed
Vastly shorter time to sedation
High pain control
Vastly reduced airway complications

Quantitatively reproducible results

Institution

University of California, Los Angeles

Inventors

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