

Folgende **dexdor** Info-Materialien sind bei uns bestellbar:

□ **Comparison of different anesthesia regimens in patients undergoing MitraClip procedures - publication synopsis (EN)**

**Comparison of a dexmedetomidine-based sedative regimen and general anesthesia among patients undergoing MitraClip procedures!**

The minimally invasive MitraClip procedure for the treatment of severe mitral valve regurgitation is performed commonly under general anesthesia, which generally is considered the anesthetic method of choice. Research has indicated that conscious sedation is also feasible for MitraClip procedures. However, it is still unclear if conscious sedation offers a significant benefit over general anesthesia.

Seventy-nine MitraClip procedures in dexmedetomidine/remifentanyl conscious sedation (DCS, n = 26) or general anesthesia (GA, n = 53), performed between 2018 and 2020 at Charité - Universitätsmedizin Berlin, were analyzed retrospectively. Patients' median age was 81 years in both groups without differences in pre-intubational EuroScore I or systolic function (left ventricular ejection fraction; tricuspid annular plane systolic excursion). Focus of this analysis was on respiratory and hemodynamic stability, catecholamine use, and procedural times.

Demographic Data and Known Medical Condition Before MitraClip Procedure	DCS (n = 26)	GA (n = 53)	p
Sex (male)	16 (61%)	22 (42%)	0.016
Age (yr)	81 (76-84)	81 (76-87)	0.976
BMI (kg/m <sup>2</sup> )	25.8 (23.7-28.2)	24.9 (22.9-29.1)	0.798
EuroScore I	4 (3-6)	7 (6-8)	0.798
LV EF (%)	50 (32-60)	50 (26-60)	0.996
TAPSE (mm)	19 (16-22)	19 (15-23)	0.911
Medical history of:			
CAD	26 (100%)	38 (72%)	0.039
BNP/4-DiV	3 (12%)	3 (6%)	0.024
PHF	23 (88%)	47 (89%)	0.977
COPD	3 (12%)	7 (13%)	0.924
DM	9 (35%)	9 (17%)	0.079
CKD	12 (46%)	24 (45%)	0.942
CABG surgery	5 (19%)	5 (10%)	0.240
Other surgery	2 (8%)	2 (4%)	0.465

**Results:** All patients under DCS received dexmedetomidine and remifentanyl, with 17 patients an additional short-term propofol application was supplemented for transesophageal echocardiography probe insertion. This was conducted in 14 patients as a single bolus and in 3 patients as a short-term propofol infusion. Significantly less remifentanyl and propofol were used for DCS compared with GA.

Successful clip implantation was performed in all patients, and conversion to an open surgical procedure was never necessary. During MitraClip procedures, respiratory parameters revealed no differences between groups, whereas patients under DCS showed higher mean arterial pressures and needed less non-epinephrine. Emergence from both anesthesia regimens to readiness for intensive care unit transfer was faster in DCS; however, total process time was comparable between groups. There were no differences in postoperative complications between DCS and GA. It should be noted this is a retrospective study of a single center with a small number of patients.

□ **Management of acute delirium in a patient with Parkinson's disease - publication synopsis (EN)**

**Management of Acute Delirium in a Patient with Parkinson's Disease**

**71-year-old male patient with a 15-year history of PD** presented with a one-week history of worsening urinary incontinence, unsteady gait and altered mental status progressively worsening at the emergency room.

**Prior to this decline:** cytostatic procedure, placed on tolmetidine, sulfamethoxazole/trimethoprim for a urinary tract infection, bupropion for his long-standing depression. His other medications included carbidozepalone, entacapone, rasagiline, clozapine nightly, amantadine, levodopa, and midodrine.

Despite numerous measures (Figure 1), his condition worsened and he was transferred to the ICU.

**Figure 1:** Time line before and after admission to the hospital. The patient's clinical course is summarized as per the interventions and the timing of his interventions, ICU: intensive care unit, TMR: trimethoprim, QT: time from start of ICU to time to end of T waves on electrocardiogram.

**On arrival to the ICU, he was awake but disoriented to self, place and time. He was confused and impulsive and had poor safety awareness and poor attention and concentration. His Glasgow coma score (GCS) was 13, his Riker score was 6 (very agitated).**

Shortly after arrival, dexmedetomidine infusion was started at a rate of 0.2 mcg/kg/hr and was titrated at a rate of 0.1 mcg/kg/hr every 20-30 minutes with a goal of a Riker score of 4 (calm and cooperative).

**The next morning, his exam improved to full orientation with no more concern for impulsivity, safety or poor attention or concentration. His GCS was 14, and his Riker Score was 4 (calm and cooperative). After twenty-four hours of dexmedetomidine infusion, the patient's mentation returned to baseline. He was observed outside of the ICU and quetiapine was restarted. He was subsequently discharged to a rehabilitation facility.**

*Even though there are no studies that have examined the use of dexmedetomidine specifically for patients with delirium and Parkinson's Disease, the guidelines for the treatment of delirium in ICU patients recommend the use of dexmedetomidine.<sup>11</sup>*

□ **Beneficial effects of dexdor in patients requiring NIV - publication synopsis (EN)**

**Beneficial effects of dexdor® in patients requiring NIV**

Non-invasive ventilation (NIV) is often used in the intensive care unit (ICU). It is associated with a reduced risk of pneumonia compared to endotracheal intubation, on the other hand, there are patients who experience agitation and delirium. In some cases, NIV is so insufficiently tolerated that intubation and mechanical ventilation are unavoidable.<sup>1</sup>

Meta-analysis of the efficacy and safety of dexmedetomidine in critically ill adults with acute respiratory failure receiving NIV in the ICU!

Major reference substances were haloperidol, midazolam, propofol, and placebo.

A total of 12 randomized controlled trials (RCTs) involving 738 patients were included. Patients were 61.5 a 6.8 years of age, the APACHE II score was 19 ± 3.3.

**Results:** Ten RCTs (n=665) reported problems with NIV, requiring endotracheal intubation. The use of dexmedetomidine reduced the risk of intubation and mechanical ventilation when compared with any other sedative or placebo (RR, 0.54; 95% CI, 0.41-0.71). This corresponds to an absolute risk reduction of 16% (95% CI, 20%-10%).

**Reduced risk of intubation**

**Forest plot showing endotracheal intubation and invasive mechanical ventilation. df = degrees of freedom, M-H = Mantel-Haenszel.**

□ **Kurzinformation für die Kitteltasche (DE)**

**Die richtige Balance entscheidet**

Ruhen, kooperative Patienten

**ANWENDUNGSHINWEISE IM ÜBERBLICK**

**Erfolgreiches PAD-Management**

PAIN, AGITATION, DELIRIUM

Informationsbroschüre (DE)



Prozedurale Sedierung (DE)



Conseils d'utilisation (FR)



Informations de base (FR)



**Sédation procédurale (FR)**

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