

HETEROGENEITY OF DEXMEDETOMIDINE TREATMENT EFFECT ON MORTALITY ACCORDING TO AGE

M.T. GOMEZ SANCHEZ,¹ R. GAZQUEZ PEREZ,¹ M. SANCHEZ VALERA,¹ D. GAMEZ TORRES,¹ T. MORENO DIAZ,¹ B. SANCHEZ RODRIGUEZ,¹
¹H.U TORRECÁRDENAS, PHARMACY, ALMERIA, SPAIN.



BACKGROUND

The Spanish Agency for Medicines and Health Products (AEMPS) published a safety letter reporting a higher risk of mortality in patients ≤ 65 years of age treated with dexmedetomidine compared to standard sedatives.¹

AIM AND OBJECTIVES



To analyze the use of dexmedetomidine in our hospital and to compare the heterogeneity of the effect on mortality according to age in real life.

MATERIALS AND METHODS



- Observational, descriptive and retrospective study
- Inclusion criteria: Patients treated with dexmedetomidine or propofol during 2021

- Sex
- Days on treatment with dexmedetomidine /propofol
- Age
- Admission diagnosis (ICU)
- Surgical intervention
- 90-day mortality

V
A
R
I
A
B
L
E
S

RESULTS



Deaths

	All patients (403 patients)	Dexmedetomidina ≤ 65 years (120 patients)	Propofol ≤ 65 years (161 patients)	Dexmedetomidina > 65 years (49 patients)	Propofol > 65 years (73 patients)
Age (years)	59 (2-85 years)	52 (2-65 years)	52 (14-65 years)	70 (66-78 years)	71 (66-85 years)
Male gender n ^o (%)	305 (75,7%)	90 (75,0%)	125	35	55
Type of admission n ^o (%)					
Non-operative	308 (76,4%)	96 (80,0%)	114 (70,8%)	47 (95,9%)	52 (71,2%)
Elective surgery	33 (8,2%)	15 (12,5%)	11 (6,8%)	2 (4,1%)	7 (9,6%)
Emergency surgery	62 (15,4%)	9 (7,5%)	36 (22,4%)	0 (0,0%)	14 (19,2%)
Admission diagnosis n ^o (%)					
Sepsis	10 (2,5%)	5 (4,2%)	3 (1,9%)	1 (2,0%)	1 (1,4%)
Respiratory	216 (53,6%)	73 (60,8%)	75 (46,6%)	33 (67,3%)	35 (47,9%)
Cardiovascular	28 (6,9%)	9 (7,5%)	6 (3,7%)	6 (12,2%)	7 (9,6%)
Trauma	58 (14,4%)	19 (15,8%)	29 (18,0%)	5 (10,2%)	5 (6,8%)
Neurological	55 (13,6%)	4 (3,3%)	34 (21,1%)	2 (4,1%)	15 (20,5%)
Other	36 (8,9%)	10 (8,3%)	14 (8,7%)	2 (4,1%)	10 (13,7%)

	Dex.	Propofol	OR	IC 95%
≤ 65	18	39	0,55	0,30 – 1,02
> 65	13	35	0,39	0,18 – 0,86
Total	31	74	0,49	0,30 – 0,78

CONCLUSION

The data obtained do not reproduce those obtained in the study on which the alert received was based. This may be due to limitations of our study. Even so, the use of dexmedetomidine in young patients should be carried out with caution. The pharmacy service has communicated the alert to the hospital services.

BIBLIOGRAPHY <https://sinaem.aemps.es/CartasFarmacovigilanciaDoc/2022/DHPC-dexmedetomidine.pdf>¹

