

PREOPERATIVE DISABILITY AND OUTCOME OF ELDERLY PATIENTS AFTER ELECTIVE SURGERY

¹Sarmiento e Castro, J. | ¹Peixoto, A.R. | ¹Teles, A.R. | ¹Gomes Campos, M. | ²Nunes Ferreira, M. | ^{1,3}Abelha, F.

¹Dept of Anaesthesiology, Centro Hospitalar São João, Porto - Portugal

²Department of Anaesthesiology, Instituto Português de Oncologia Francisco Gentil do Porto, Porto - Portugal

³Department of Anaesthesiology, Hospital de São João; Faculdade de Medicina Universidade do Porto, Porto - Portugal

BACKGROUND AND GOAL OF STUDY

Disability is defined by the World Health Organization (WHO) as difficulties in any area of functioning as they relate to environmental and personal factors.

Study goal: Evaluate the influence of preoperative disability on the recovery of elderly patients after elective surgery.

MATERIAL AND METHODS

Observational prospective study

Inclusion Criteria: Patients aged > 60 years, submitted to elective from May to July 2017 were included.

Exclusion criteria: age < 60 years old; inability to give informed consent; patients admitted in the ICU after surgery.

WHODAS (WHO Disability Assessment Schedule):

- Evaluated before surgery (T0), 30 days (T30) and 3 months (T90) after surgery. **Disability: considered to be present (DP) when the score WHODAS was ≥ 25%.**

Clinical Frailty Scale (CFS) evaluated at T0 and T90

- Vulnerability if score ≥ 5.**

Quality of Recovery (QoR15):

- Evaluated before (T0) and 24h (T1) after surgery.

Health-related Quality of Life (Euro QOL 5 dimensions - EQ5D)

- Measured **Quality of life (QOL)** at T0 and T90.
- Poor Quality of Life (PQL) was defined as having problems in any of the 5 dimensions of EQ5D.**

Physiological and Operative Severity Score for the Enumeration of Mortality and Morbidity (**POSSUM**) was also evaluated.

Statistical analysis: The Chi-square, Fisher's exact or Mann-Whitney U tests were used for comparisons.

RESULTS AND DISCUSSION

Total of included patients: **235**

82 with preoperative disability

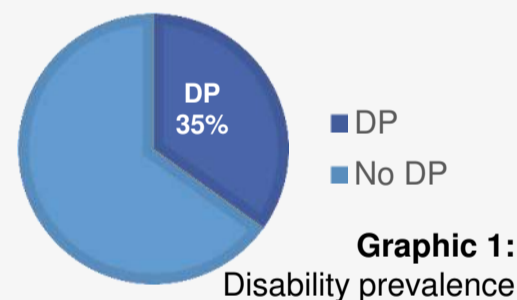


Table 1 – Demographic and perioperative outcomes. **DP**- disability patients

Variable	DP (n=82)	No DP (n=153)	p value	
Age, years, median [P25- P75]	71.50 [66-81.25]	68 [64-74]	<0.001 ^b	
Gender	Male	31 (38%)	77 (50%)	0.075 ^b
	Female	51 (62%)	76 (50%)	
Type of Anaesthesia	General	39 (47%)	100 (65%)	0.051 ^a
	Regional	22 (27%)	31 (20%)	
	Combined	15 (18%)	17 (11%)	
	Sedation/ Analgesia	6 (7%)	5 (3%)	
Hospital length of stay, days, median [P25- P75]	8 [3.75-31]	4 [2-7]	<0.001 ^c	
Risk of morbidity (POSSUM)	37%	28%	0.022 ^c	
Risk of mortality (POSSUM)	7%	5%	0.026 ^c	
Re-intervention T30	11 (14%)	4 (3%)	0.001 ^a	
Re-intervention T90	14 (18%)	11 (7%)	0.013 ^a	
In-hospital mortality	5 (6%)	1 (0.7%)	0.018 ^a	
Overall mortality T90	7 (9%)	2 (1.3%)	0.008 ^a	

Table 2: Frailty by CFS.

Vulnerability		DP (n=82)	No DP (n=153)	p Value
T0	With VB	44 (54%)	9 (6%)	<0.001 ^a
	Without VB	38 (46%)	144 (94%)	
T90	With VB	47 (57%)	16 (11%)	<0.001 ^a
	Without VB	28 (34%)	136 (89%)	

Table 3 Pre and postoperative health status comparison by EQ-D5.

EQ-5D		DP (n=82)	No DP (n=153)	p value
Mobility	T0	73 (89%)	50 (32%)	< 0.001 ^a
	T90	70 (85%)	54 (36%)	
Self-care	T0	58 (71%)	22 (14%)	< 0.001 ^a
	T90	59 (72%)	35 (23%)	
Usual Activities	T0	70 (85%)	34 (22%)	< 0.001 ^a
	T90	68 (83%)	56 (37%)	
Pain	T0	69 (84%)	57 (37%)	< 0.001 ^a
	T90	64 (78%)	54 (35%)	
Anxiety	T0	73 (89%)	100 (65%)	< 0.001 ^a
	T90	63 (77%)	75 (50%)	

Table 4 – Quality of recovery according to QOR-15.

QoR-15	DP (n=82)	No DP (n=153)	p value
T0, median [P25- P75]	107 [95-118.5]	135 [126-143]	<0.001 ^c
T1, median [P25- P75]	100 [80-123.25]	116 [100-132.5]	<0.001 ^c

Legend: ^a –Chi-squared test; ^b –Fisher test; ^c –Mann-Whitney test; **DP** – disability patients; **No DP** – patients without disability; **WHODAS** - World Health Organization Disability Assessment Schedule; **VB**- Vulnerability; **EQ 5D**- Euro quality of life 5 dimensions; **T0**- before surgery; **T1**- 24h after surgery; **T30**- 1 month after surgery; **T90**- 3months after surgery

CONCLUSIONS

The incidence of disability was considerably high and more frequent among frail patients and in patients with problems in quality of life. They were at higher risk of mortality and morbidity. PD were also associated with poorer quality of recover, higher postoperative mortality and more surgical reinterventions.