GRADE OF CHRONICITY IN NONAGENARIANS: CAN WE COMPARE NUMBER AND TYPE OF DRUG INTERVENTIONS?

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BACKGROUND

Impaired functionality, cognitive decline, comorbidity and polypharmacy in nonagenarians increase mortality risks associated with age. Polypharmacy (>4 chronic drugs) in elder people is related to an increase of drug-related problems (DRP) and worse health outcomes due to potentially inappropriate prescriptions (PIP).

To optimize medical care for chronic patients, our Healthcare System stratifies chronic patients according to their grade of chronicity in: chronic complex patient (CCP) or CCP with advance chronic disease (CCP-ACD).

OBJECTIVES

To evaluate the differences related to functionality, cognition, polypharmacy and pharmacist interventions due to DRP (PI-DRP) regarding the grade of chronicity.

MATERIAL AND METHODS

We included ≥90 years-old patients with polypharmacy discharged between January and June of 2017 from an Acute Geriatric Unit (81 beds) of a Geriatric Healthcare Centre.

Registered variables: age, sex, grade of chronicity, Barthel Index and Pfeiffer Test before admission. Number of chronic drugs/patient, number of PIP/patient and chronic benzodiazepines use before admission and PI-DRP.

Data are presented as median (Q1-Q3). We used Fisher's exact test and Chi-square test for qualitative data and U-Mann-Whitney-Wilcoxon for quantitative data. Statistical analysis was performed with Stata13.

RESULTS

Patients included: 118, 83 CCP and 35 CCP-ACD. The differences in registered variables in both groups are shown in the following table:

	Chronic Complex Patient (CCP) (n=83)	CCP with advance chronic disease (CCP-ACD) (n=35)	p
Age (years)	92 (90-94)	94 (91-95)	0.029
Females (n; %)	58 (69.9%)	20 (57.1%)	0.205
Barthel Index*	55 (40-80)	40 (20-60)	0.010
Pfeiffer Test*	3 (1-6)	4 (2-8)	0.432
Chronic drugs/patient*	10 (8-12)	10 (7-14)	0.972
Average of PIP/patient* (±SD)	1.2 (±0.88)	0.86 (±0.85)	0.049
Chronic Benzodiazepines use* (n; %)	30 (36.1%)	6 (17.1%)	0.050
Indication PI-DRP (n; %)	10 (12.0%)	2 (5.7%)	0.506
Effectivity PI-DRP (n; %)	11 (13.3%)	5 (14.3%)	0.881
Safety PI-DRP (n; %)	1 (1.2%)	4 (11.4%)	0.027
Advisement to nurses PI-DRP (n; %)	3 (3.6%)	2 (5.7%)	0.632
Other PI-DRP (n; %)	11 (13.3%)	5 (14.3%)	0.881
Length of stay (days)	9 (6-17)	9 (3-13)	0.295
Mortality (n; %)	23 (27.7%)	15 (42.9%)	0.132

* Data at admission

CONCLUSIONS

- CCP-ACD group are older than CCP, and have worse results in functional status without differences in cognitive function.
- Although the number of chronic drugs prescribed between the two groups are similar, CCP-ACD have significantly less PIP and use less chronic benzodiazepines than CCP.
- The significative pharmaceutical interventions have been those of safety in the CCP-ACD group.