

## PHARMACEUTICAL INTERVENTION TO REDUCE THE ANTICHOLINERGIC BURDEN IN OLDER HOSPITALISED PATIENTS

**Mensa-Vendrell M**, Rizo-Gómez A, Romero-Domínguez R, Ballesteros-Cabañas G, Barrantes-González M, Soy-Muner D.
   
 Pharmacy Department, Hospital Plató, Barcelona - [Mireia.mensa@hospitalplato.com](mailto:Mireia.mensa@hospitalplato.com)

### Background

**Anticholinergic burden** has been associated with cognitive and functional impairment, risk of falls, hospitalizations and morbi/mortality, especially in older patients.

### Aim

- To study the anticholinergic burden in older patients in a hospital setting.
- To reduce the use of **drugs with anticholinergic effects** (DACE) in those patients with high anticholinergic risk (HAR).

### Material and methods

- Cross-sectional study. Scheduled once a week for 4 weeks between August-September, 2019.
- Inclusion criteria: patients aged  $\geq 65$  years-old admitted to the internal medicine. Exclusion: Patients with palliative care and readmissions.
- Gender, age, length of hospital stay and the nº of drugs prescribed were registered. Anatomical, Therapeutic and Chemical (ATC) classification was used to classify drugs.

1

Anticholinergic burden was calculated using **Drug Burden Index (DBI)** throughout an online calculator: <http://anticholinergicscales.es/patients>

Ophthalmic drugs and medication "as needed" were not assessed.

2

The **medication plan of patients with HAR was reviewed** together with their physicians in order to reduce the anticholinergic burden through:

- Reducing the dose
- Stopping the treatment
- Changing the DACE

### Results

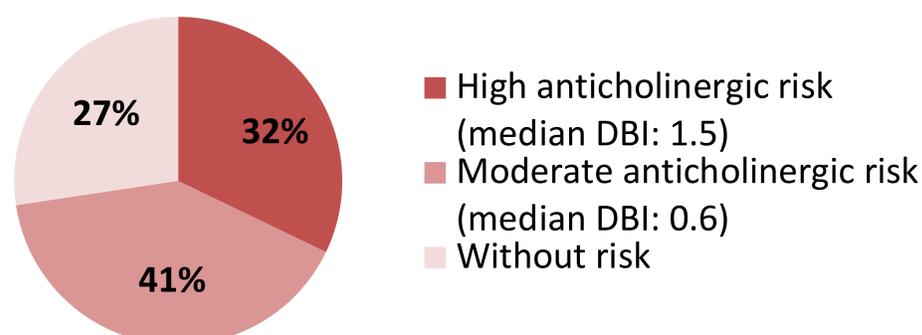
#### Demographic and treatment data (N=82)

Age in years (mean $\pm$ SD)	85 $\pm$ 8
Women	70%
Length of hospital stay (median, [IQR])	7 [4-9] days
Nº of drugs prescribed (mean $\pm$ SD)	10 $\pm$ 3.5
Patients with at least one DACE prescribed (%)	59 (72%)
Nº of DACE prescribed (median, [IQR])	2 [1-3]

#### Most common DACE grouped by ATC were:

- Anxiolytics (N05B, N=30)
- Antidepressants (N06A, N=28)
- Antipsychotics (N05A, N=22)
- Opioids (N02A, N=16)
- Antiepileptic (N03A, N=14)

#### Anticholinergic burden in older patients



- Four out of 27 (15%) interventions were accepted and consisted in 2 dose reduction and 2 DACE deprescriptions
- Interventions were not accepted mainly because the drugs were part of the chronic patient's psychiatric or neurological treatment, the presence of refractory pain or insomnia disorders.

### Conclusion

- Our pharmacological intervention was **poorly accepted by physicians**.
- During the hospitalization process it is difficult to re-evaluate the need for adjusting chronic medication especially related to psychiatric or neurological pathologies.
- We believe that this kind of study would have more impact at the primary care level.

