

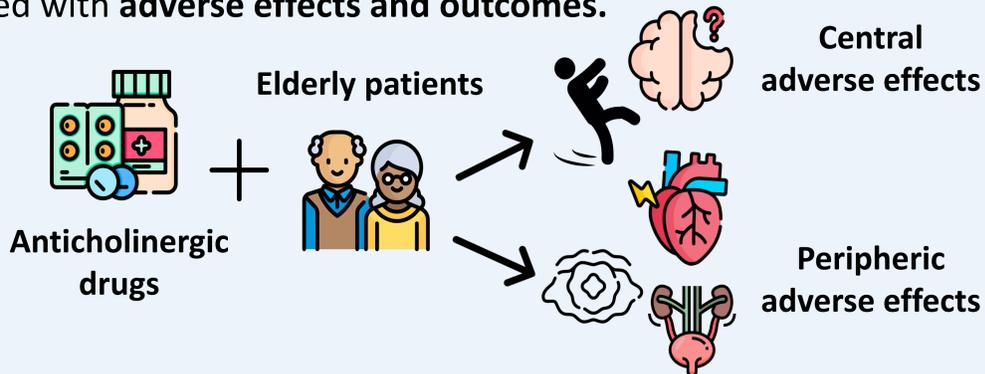
THE KTIA-SCORAC STUDY : SECURING THE MEDICATION MANAGEMENT OF ELDERLY PATIENTS BY THE SYSTEMATIC EVALUATION OF ANTICHOLINERGIC LOAD SCORES VIA A CLINICAL DECISION SUPPORT SYSTEM

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BACKGROUND & IMPORTANCE

The use of **anticholinergic drugs** and their **cumulative effects** are highly prevalent in **older people** and are associated with **adverse effects and outcomes**.



Pharmaceutical analysis to assess anticholinergic risk among elderly patients remains a **challenge** :

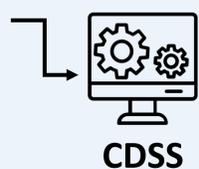
- constrained human resources
- insufficient functionalities of CPOE in France
- lack of awareness on the anticholinergic burden

AIM & OBJECTIVE

- 1 Evaluate and stratify anticholinergic scores based on patient profile, admission unit, and class of drugs
- 2 Propose guidelines for medication management
- 3 Secure drug related management by reducing anticholinergic patient's exposure.

MATERIAL & METHODS

Prescription data for all patients > 65 years old admitted in the hospital (01/04/23 to 31/05/23)



CALS: CRIDECCO Anticholinergic load scale

- 217 drugs with anticholinergic properties integrated
- Synthesis of 10 scores included ADS, ARS and ACB
- 1: low potency, 2: Medium potency, 3: High potency
- More sensitive than other scores

ALERT if total anticholinergic burden is ≥ 0 → Pharmaceutical analysis

RESULTS

1186 patients (n=1316 admissions) were enrolled with 130 patients re-hospitalized

Table 1. Distribution of CALS at admission (n=1316)

Score	Admission						
	0	1	2	3	4	5	> 5
n	910	195	97	58	45	7	4

70% (n= 910) score = 0
30% (n= 406) score > 0

Table 2. Distribution of patients with a score ≥ 3 , ≥ 4 or ≥ 5 at admission and discharge

Score ≥ 3		Score ≥ 4		Score ≥ 5	
At admission	114 (9%)	56 (4%)	11 (1%)	At discharge	340 (26%)
At discharge	340 (26%)	211 (16%)	115 (9%)	At admission	114 (9%)

Transitions: 114 to 340 (x 2,9), 56 to 211 (x 3,77), 11 to 115 (x 10,45)

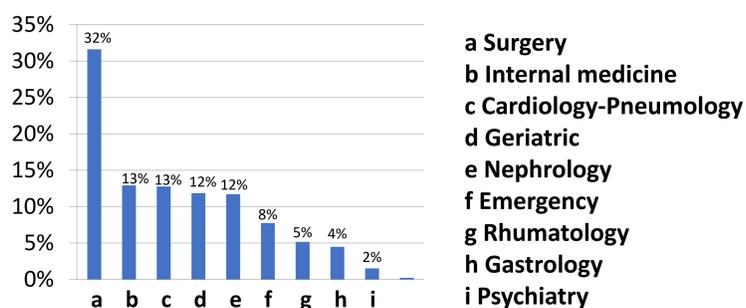


Figure 1. Service of admission of patients with CALS ≥ 0

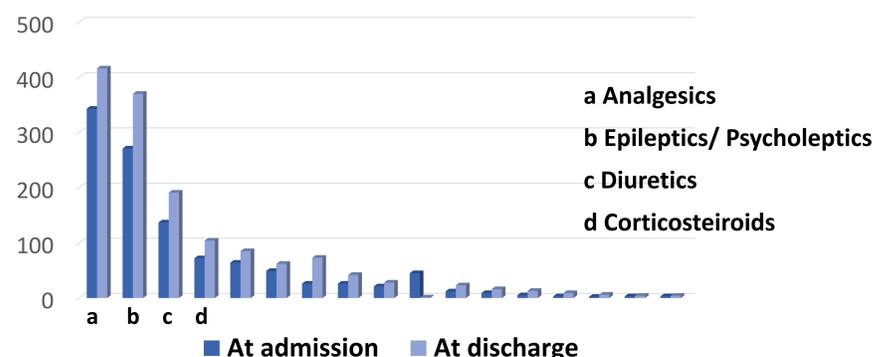


Figure 3. Distribution of anticholinergic drugs by class at admission and discharge

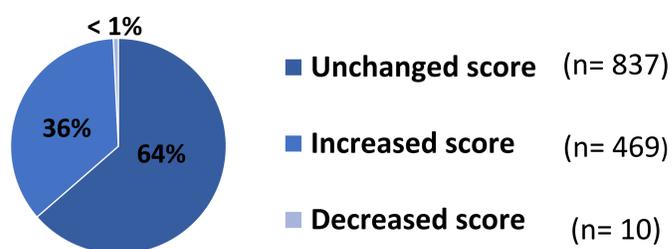


Figure 2. Evolution of CALS during hospitalization

CONCLUSION

- 30% of hospitalized patients > 65 years old had a risk of **anticholinergic burden** at their admission
- This risk **does not decrease** during hospitalizations
- A **threshold of 5** might be a potential cut-off choice for **pharmaceutical interventions** in futures studies due to its **significant increase** for a small sample size

