CHRU de Tours

Long-term survival of elderly patients with acute respiratory infection hospitalized in intensive care unit

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INTRODUCTION

- Elderly patients hospitalized in intensive care unit (ICU) for acute respiratory infections increased during the last decade*
- Associated with an important mortality rate in critically ill elderly patients
- Which is the beneficial effect of ICU admission among this population?

➡ Aim of the study:

- **To assess the long-term outcome of acute respiratory infection with ICU hospitalization in patients ≥ 80 yo**

** Ten-year trends in intensive care admissions for respiratory infections in the elderly. Laporte, et al. Ann Intensive Care. 2018; 8: 84*

METHODS

- Retrospective multicentre cohort
  - Patients ≥ 80 yo discharged alive after acute respiratory infection in ICU
  - Period: 2011-2013 in one French region
  - Based on hospital discharge databases (ICD-10, 2009-2017)

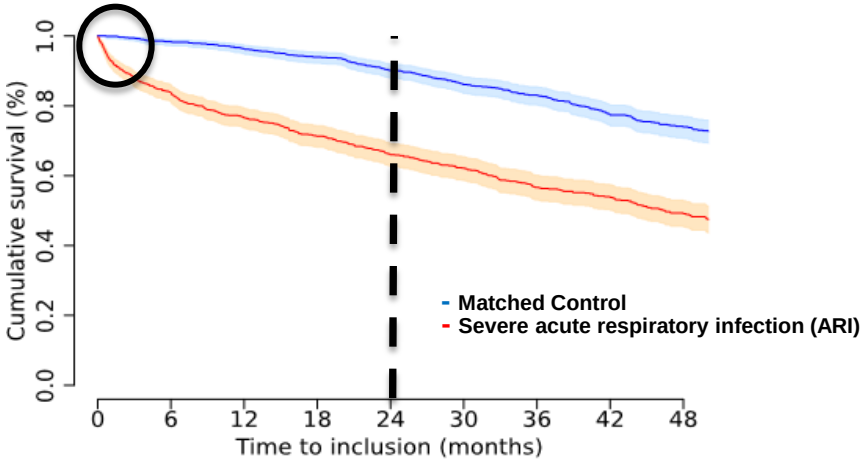
- Matching with a control population among patients undergoing cataract surgery
  - On age, sex, frailty score* (FS) and chronic comorbidities over the 2 years before the inclusion
  - Using a propensity score (matching algorithm 1:1 ratio, caliper 0.002)

- **Evolution of the 2-year mortality, healthcare utilization and FS comparing the 2-year period before/after the initial stay**

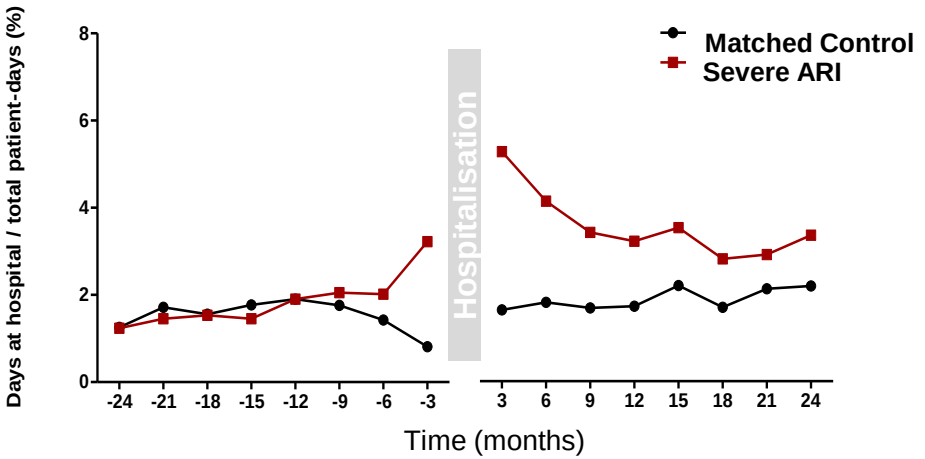
** Development and validation of a Hospital Frailty Risk Score focusing on older people in acute care settings using electronic hospital records: an observational study. Gilbert T, et al. Lancet. 2018 May 5;391(10132):1775-1782*

RESULTS

- 1,658 elderly patients included, 74% discharged alive (n=1,220)
  - 988 of these successfully matched with 988 controls

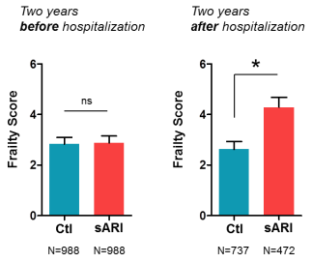


Survival at 4 years according to initial hospitalization



Healthcare utilizations before/after the initial stay

- After 2 years in critically-ill patients
  - Increasing mortality, healthcare use and frailty compared to controls



Evolution of the FS

DISCUSSION

- The study represents
  - Real-life data with long follow-up of the targeted population
  - Comparison with a matched population on age, sex, and comorbidities

- Elderly patients with severe acute respiratory infection survived ICU in 3 quarters of cases, but
  - Major risk of death in the following months
  - Added to a substantial increase in healthcare consumption and frailty score

- These findings provide data for more informed goals-of-care discussions and may help target post-ICU discharge service/healthcare facilities for these high-risk groups