

# **POSTER PRESENTATION**

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# Prevalence of extended-spectrum betalactamase producing–Enterobacteriaceae (ESBL-E) carriage on admission at Geneva University Hospitals (HUG)

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# Introduction

The increasing prevalence of ESBL-E in the community is a cause of concern for hospitals. Early detection of ESBL-E carriers on admission could allow timely implementation of control measures or appropriate selection of antimicrobials.

# **Objectives**

To describe the current prevalence of ESBL-E rates upon admission to 4 different services at HUG, in the context of a multicenter European study (R-Gnosis).

# **Methods**

Patients admitted to 4 different services were screened by rectal swabs on admission. From January 2014 through January 2015, patients admitted to 4 wards, including: Ortho1 (sport traumatology), Ortho 2 (septic); Geriatrics (2 wards) and patients undergoing elective colorectal surgery (ECS) were screened from April 2013-October 2014.

### **Results**

Overall, from 2394 admitted patients, 2136 were screened on admission (89.2%). Median age was 67.3 years (SD  $\pm 20.9$ ); 51.6% were male. Only 92/2136 (4.3%) had a previously known status of ESBL carriage. A total of 226/2136 (10.6%) patients were found to be ESBL-E carriers: *E. coli* (n=166; 73.4%); *K. pneumoniae* (n=26; 11.5%) and other Enterobacteriaceae (n=34; 15.0%). Among *K. pneumoniae* carriers on admission, 24/26 (92.3%), had a previous hospitalization less than 12 months before admission screening and 21/26 (80.8%) had the previous hospitalization

within 3 months only. ESBL-E carriage was 83/981 (8.4%) and 61/430 (14.2%) for Ortho 1 and 2 respectively; Geriatrics, 42/371 (11.3%); and ECS, 41/354 (11.6%).

### **Conclusion**

Overall 10.6% of patients screened were ESBL-E carriers upon admission at HUG, mostly due to ESBL-producing *E. coli*. Patients admitted to septic orthopedics, geriatrics and ECS had a higher prevalence on admission. The majority of ESBL- *Klebsiella pneumonia* carriers had a recent history of hospitalization.

# Disclosure of interest

None declared.

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