

**P2611 Multi-centre study of the prevalence of acquired carbapenemase producers in the ICU sinks in hospitals from the south of Spain: results from the CANALIS project**

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**Background:** Contaminated sinks have been associated to hospital outbreaks caused by carbapenemases-producing bacteria (CPB). The aim of this multicentre study was to analyse the prevalence of CP colonized sinks in ICUs of 4 hospitals without an outbreak setting.

**Materials/methods:** Four hospitals from the South of Spain were included with different number of sinks in each ICU and frequency of sample taking: HA (11 sinks, 5 samplings), HB (32 sinks, 4 samplings), HC (37 sinks, 2 samplings) and HD (16 sinks, 2 samplings) during a period of 6 months. Water from sinks were cultured both quantitatively by using a spiral plater and after enrichment on chromogenic selective media. Each different colony was quantified by using Flashandgo (IUL) software and further identification was performed with Maldi TOF, carbapenemases were studied with NG Carba 5 immunochromatography and by PCR. In HB disinfection was performed and in HD positive siphons were renovated once.

**Results:** Acquired carbapenemases producers were detected in all ICUs, with different median prevalences from 9,1% of positive sinks in HA to 62,5% in HD (Table 1). CPB load found was >2 log CFU/ml in 29%, 76% and 95% of positive sinks in HB, HC and HD, respectively. In HB, 2 disinfectant-treated sinks out of 2 reappeared positive after treatment. In HD, 8 renovated sinks out of 10 reappeared positive 1 month after change. Twenty (43%) sinks were colonized by isolates producing metallo-betalactamases (MBL), while MBL-producing pseudomonas, OXA-48-producing Enterobacteriales and KPC-producing Enterobacteriales were found in 16 (34%), 7 (15%) and 3 (6%) sinks, respectively.

<b>Table 1</b>	<b>No. of colonized sinks/Total of sinks</b>				
	1 <sup>st</sup> sampling	2 <sup>nd</sup> sampling	3 <sup>rd</sup> sampling	4 <sup>th</sup> sampling	5 <sup>th</sup> sampling
HA	6/11	0/11	0/11	1/11	2/11
HB	4/32	3/32	4/32	3/32	
HC	12/37	9/37			
HD	10/16	10/16			

**Conclusions:** : 1) ICUs sinks could be colonized by CPB in our area without an outbreak, and the most prevalent microorganisms are MBL-producing Enterobacteriales. 2) The rates of colonized sinks and CPB bacterial load presented an important variation depending on the center. 3) The implementations of disinfectants or change of siphons did not reduced the number of colonized sinks.

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