

## **Revisión de la Literatura Microbiología. SEIMC 2019**

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### **Cambios en taxonomía bacteriana**

- Munson E, Carroll KC. An Update on the Novel Genera and Species and Revised Taxonomic Status of Bacterial Organisms Described in 2016 and 2017. *J Clin Microbiol.* 2019 Jan 30;57(2).

### **Problemas con los estudios de sensibilidad a algunos antibióticos**

- Aurélie Jayol, Patrice Nordmann, Catherine André, Laurent Poirel, Véronique Dubois. Evaluation of three broth microdilution systems to determine colistin susceptibility of Gram-negative bacilli. *Journal of Antimicrobial Chemotherapy* 2018; 73 (5): 1272–1278.
- van den Bijllaardt W, Schijffelen MJ, Bosboom RW, Cohen Stuart J, Diederens B, Kampinga G, Le TN, Overdevest I, Stals F, Voorn P, Waar K, Mouton JW, Muller AE. Susceptibility of ESBL *Escherichia coli* and *Klebsiella pneumoniae* to fosfomicin in the Netherlands and comparison of several testing methods including Etest, MIC test strip, Vitek2, Phoenix and disc diffusion. *J Antimicrob Chemother* 2018; 73(9): 2380-2387.
- E. Matuschek . Antimicrobial susceptibility testing of colistin – evaluation of seven commercial MIC products against standard broth microdilution for *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, and *Acinetobacter* spp. *Clin Microbiol Infect* 2018; 24(8): 865-870.
- Campeau SA, Schuetz AN, Kohner P, Arias CA, Hemarajata P, Bard JD, Humphries RM. Variability of Daptomycin MIC Values for *Enterococcus faecium* When Measured by Reference Broth Microdilution and Gradient Diffusion Tests. *Antimicrob Agents Chemother* 2018 Aug 27;62(9). pii: e00745-18.

### **Nuevos métodos rápidos fenotípicos de detección de determinantes de resistencia**

- Nordmann P, Poirel L, Mueller L. Rapid Detection of Fosfomicin Resistance in *Escherichia coli*. *J Clin Microbiol.* 2019 Jan 2;57(1). pii: e01531-18.
- Lescat M, Poirel L, Tinguely C, Nordmann P. A Resazurin Reduction-Based Assay for Rapid Detection of Polymyxin Resistance in *Acinetobacter baumannii* and *Pseudomonas aeruginosa*. *J Clin Microbiol.* 2019 Feb 27;57(3). pii: e01563-18.

- Laurent Dortet, Didier Tandé, Dominique de Briel, Sandrine Bernabeu, Camille Lasserre, Guillaume Gregorowicz, Agnès B Jousset, Thierry Naas. MALDI-TOF for the rapid detection of carbapenemase-producing Enterobacteriaceae: comparison of the commercialized MBT STAR®-Carba IVD Kit with two in-house MALDI-TOF techniques and the RAPIDEC® CARBA NP. *Journal of Antimicrobial Chemotherapy* 2018; 73 (9): 2352–2359.
- Idelevich EA, Sparbier K, Kostrzewa M, Becker K. Rapid detection of antibiotic resistance by MALDI-TOF mass spectrometry using a novel direct-on-target microdroplet growth assay. *Clin Microbiol Infect.* 2018 Jul;24(7):738-743.

### **Nuevos métodos inmunológicos para la detección y caracterización de determinantes de resistencia**

- Cointe A, Bonacorsi S, Truong J, Hobson C, Doit C, Monjault A, Bidet P, Birgy A. Detection of Carbapenemase-Producing Enterobacteriaceae in Positive Blood Culture Using an Immunochromatographic RESIST-4 O.K.N.V. Assay. *Antimicrob Agents Chemother.* 2018 Nov 26;62(12). pii: e01828-18.
- Takissian J, Bonnin RA, Naas T, Dortet L. NG-Test Carba 5 for Rapid Detection of Carbapenemase-Producing Enterobacteriales from Positive Blood Cultures. *Antimicrob Agents Chemother.* 2019 Apr 25;63(5). pii: e00011-19.
- Charlotte Fauconnier, Magali Dodemont, Angélique Depouhon, Ahalieyah Anantharajah, Alexia Verroken, Hector Rodriguez-Villalobos. Lateral flow immunochromatographic assay for rapid screening of faecal carriage of carbapenemase-producing Enterobacteriaceae. *Journal of Antimicrobial Chemotherapy* 2019; 74 (2): 357–359.

### **Diagnóstico rápido molecular**

- Blauwkamp TA, Thair S, Rosen MJ, Blair L, Lindner MS, Vilfan ID, Kawli T, Christians FC, Venkatasubrahmanyam S, Wall GD, Cheung A, Rogers ZN, Meshulam-Simon G, Huijse L3, Balakrishnan S, Quinn JV, Hollemon D, Hong DK, Vaughn ML, Kertesz M, Bercovici S, Wilber JC, Yang S. Analytical and clinical validation of a microbial cell-free DNA sequencing test for infectious disease. *Nat Microbiol.* 2019 Apr;4(4):663-674. doi: 10.1038/s41564-018-0349-6.
- Dorman SE, Schumacher SG, Alland D, Nabeta P, Armstrong DT, King B, Hall SL, Chakravorty S, Cirillo DM, Tukvadze N, Bablishvili N, Stevens W, Scott L, Rodrigues C, Kazi MI, Joloba M, Nakiyingi L, Nicol MP, Ghebrekristos Y, Anyango I, Murithi W, Dietze R, Lyrio Peres R, Skrahina A, Auchynka V, Chopra KK, Hanif M, Liu X, Yuan X, Boehme CC, Ellner JJ, Denking CM. Xpert MTB/RIF Ultra for

detection of Mycobacterium tuberculosis and rifampicin resistance: a prospective multicentre diagnostic accuracy study. *Lancet Infect Dis.* 2018 Jan;18(1):76-84. doi: 10.1016/S1473-3099(17)30691-6.

### Estudios epidemiológicos

- Diane M Parente, Cheston B Cunha, Eleftherios Mylonakis, Tristan T Timbrook. The Clinical Utility of Methicillin-Resistant Staphylococcus aureus (MRSA) Nasal Screening to Rule Out MRSA Pneumonia: A Diagnostic Meta-analysis With Antimicrobial Stewardship Implications. *Clinical Infectious Diseases* 2018; 67 (1): 1–7.
- Decraene V, Phan HTT, George R, Wyllie DH, Akinremi O, Aiken Z, Cleary P, Dodgson A, Pankhurst L, Crook DW, Lenney C, Walker AS, Woodford N, Sebra R, Fath-Ordoubadi F, Mathers AJ, Seale AC, Guiver M, McEwan A, Watts V, Welfare W, Stoesser N, Cawthorne J; TRACE Investigators' Group. A Large, Refractory Nosocomial Outbreak of Klebsiella pneumoniae Carbapenemase-Producing Escherichia coli Demonstrates Carbapenemase Gene Outbreaks Involving Sink Sites Require Novel Approaches to Infection Control. *Antimicrob Agents Chemother.* 2018 Nov 26;62(12). pii: e01689-18.
- Lim YJ, Park HY, Lee JY, Kwak SH, Kim MN, Sung H, Kim SH, Choi SH. Clearance of carbapenemase-producing Enterobacteriaceae (CPE) carriage: a comparative study of NDM-1 and KPC CPE. *Clin Microbiol Infect.* 2018 Oct;24(10):1104.e5-1104.e8.

### Analisis económico de la resistencia antibiótica

- Cassini A, Högberg LD, Plachouras D, Quattrocchi A, Hoxha A, Simonsen GS, Colomb-Cotinat M, Kretzschmar ME, Devleeschauwer B, Cecchini M, Ouakrim DA, Oliveira TC, Struelens MJ, Suetens C, Monnet DL; Burden of AMR Collaborative Group. Attributable deaths and disability-adjusted life-years caused by infections with antibiotic-resistant bacteria in the EU and the European Economic Area in 2015: a population-level modelling analysis. *Lancet Infect Dis.* 2019 Jan;19(1):56-66. doi: 10.1016/S1473-3099(18)30605-4.