ABR-Scan Science Week 48

Unit for Antibiotics and Infection Control

This ABR-Scan Science is compiled by the Unit for Antibiotics and Infection Control at the Public Health Agency of Sweden. It includes a summary of links to recent articles from a selection of 17 scientific journals that we find interesting. All journals included in the scan are listed at the bottom of the document. The articles are sorted according to our categorization: surveillance, treatment and diagnosis, prevention and intervention, microbiology and other. If you have any comments or suggestions, please send an e-mail to ABR-scan@folkhalsomyndigheten.se

Surveillance

Ceftriaxone-Resistant Neisseria gonorrhoeae, Canada, 2017. Emerging Infectious Diseases

Prevalence of antibiotic prescription in pediatric outpatients in Italy: the role of local health districts and primary care physicians in determining variation. A multilevel design for healthcare decision support. BMC Public Health

Long-term carriage of extended-spectrum β -lactamase-producing Escherichia coli and Klebsiella pneumoniae in the general population in the Netherlands. <u>Clinical Infectious Diseases</u>

Association between prior antibiotic therapy and subsequent risk of community-acquired infections: a systematic review. Journal of Antimicrobial Chemotherapy

Utilization of Antibiotics in Long-Term Care Facilities in British Columbia, Canada. <u>Journal of the American Medical Directors Association</u>

Treatment and diagnosis

Telemedicine as an effective intervention to improve antibiotic appropriateness prescription and to reduce costs in pediatrics. <u>Italian Journal of Pediatrics</u>

Retrospective review of ceftriaxone versus levofloxacin for treatment of E. coli urinary tract infections. <u>International Journal of Clinical Pharmacy</u>

Comparison of Outcomes of antibiotic Drugs and Appendectomy (CODA) trial: a protocol for the pragmatic randomised study of appendicitis treatment. BMJ Open

Diagnosing Infection in a Neonate Using Whole-Body Screening Magnetic Resonance Imaging. Pediatrics

Antibiotic therapy in neonates and impact on gut microbiota and antibiotic resistance development: a systematic review. <u>Journal of Antimicrobial Chemotherapy</u>

Ceftazidime/avibactam alone or in combination with aztreonam against colistin-resistant and carbapenemase-producing *Klebsiella pneumonia*. <u>Journal of Antimicrobial Chemotherapy</u>

The role of dalbavancin in the multi-disciplinary management of wound infections in orthopaedic surgery. <u>Journal of Chemotherapy</u>

Procalcitonin-guided antibiotic therapy in intensive care unit patients: a systematic review and meta-analysis. <u>Annals of Intensive Care</u>

Study design considerations for the Standardized Treatment of Pulmonary Exacerbations 2 (STOP2): A trial to compare intravenous antibiotic treatment durations in CF. Contemporary Clinical Trials

Applying pharmacokinetic/pharmacodynamic principles for optimizing antimicrobial therapy during continuous renal replacement therapy. <u>Anaesthesiology Intensive Therapy</u>

Prevention and intervention

Addressing antimicrobial resistance in the UK and Europe. Lancet Infectious Diseases

Use of mathematical modelling to assess the impact of vaccines on antibiotic resistance. <u>Lancet Infectious Diseases</u>

Global infection prevention and control priorities 2018–22: a call for action. Lancet Global Health

Effect of antibiotic stewardship on the incidence of infection and colonisation with antibiotic-resistant bacteria and *Clostridium difficile* infection: a systematic review and meta-analysis. <u>Lancet Infectious Diseases</u>

The economic evaluation of an antibiotic checklist as antimicrobial stewardship intervention. Journal of Antimicrobial Chemotherapy

Impact of antimicrobial stewardship interventions on *Clostridium difficile* infection and clinical outcomes: segmented regression analyses. <u>Journal of Antimicrobial Chemotherapy</u>

Preoperative urine culture is unnecessary in asymptomatic men prior to prostate needle biopsy. International Urology and Nephrology

Restricting the use of antibiotics in food-producing animals and its associations with antibiotic resistance in food-producing animals and human beings: a systematic review and meta-analysis. <u>Lancet Planetary Health</u>

Comment: Antimicrobial use and resistance in animals and human beings. Lancet Planetary Health

Comment: Food industry must act to safeguard the future of antibiotics. Lancet Planetary Health

Microbiology

Mechanisms leading to *in vivo* ceftolozane/tazobactam resistance development during the treatment of infections caused by MDR *Pseudomonas aeruginosa*. <u>Journal of Antimicrobial</u> Chemotherapy

Rapid detection of ESBL, carbapenemases, MRSA and other important resistance phenotypes within 6–8 h by automated disc diffusion antibiotic susceptibility testing. <u>Journal of Antimicrobial Chemotherapy</u>

Resident Microbiome Disruption with Antibiotics Enhances Virulence of a Colonizing Pathogen. Scientific Reports

Other

Situational analysis of antibiotic use and resistance in Ghana: policy and regulation. <u>BMC Public</u> Health

Not Just Antibiotics: Is Cancer Chemotherapy Driving Antimicrobial Resistance? <u>Trends in Microbiology</u>

Comment on: Role of cephalosporins in the era of *Clostridium difficile* infection. <u>Journal of</u> Antimicrobial Chemotherapy

Increase in antimicrobial resistance and emergence of major international high-risk clonal lineages in dogs and cats with urinary tract infection: 16 year retrospective study. <u>Journal of Antimicrobial Chemotherapy</u>

Cryptic silver resistance is prevalent and readily activated in certain Gram-negative pathogens. Journal of Antimicrobial Chemotherapy

The publications included in the scan are: Antimicrobial Agents and Chemotherapy, British Medical Journal, Clinical Infectious Diseases, Clinical Microbiology and Infection, Emerging Infectious Diseases, Eurosurveillance, Infection Control & Hospital Epidemiology, Infectious Diseases, JAMA - The Journal of the American Medical Association, Journal of Antimicrobial Chemotherapy, Journal of Hospital Infection, Journal of Infectious Diseases, Lancet, Lancet Infectious Diseases, New England Journal of Medicine, Pediatrics and Scandinavian Journal of Primary Health Care. In addition, other articles from other publications can be included.