ABR-Scan Science Week 50

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

Early transmissible ampicillin resistance in zoonotic Salmonella enterica serotype Typhimurium in the late 1950s: a retrospective, whole-genome sequencing study. Lancet Infectious Diseases

Trends in Intravenous Antibiotic Duration for Urinary Tract Infections in Young Infants. Pediatrics

Risk factors for extended-spectrum β -lactamase-producing Escherichia coli urinary tract infection in the community in Denmark: a case-control study. Clinical Microbiology and Infection

Molecular epidemiology of penicillinase-producing Neisseria gonorrhoeae isolates in France. Clinical Microbiology and Infection

Colonization by multidrug-resistant organisms in long-term care facilities in Italy: a point-prevalence study. <u>Clinical Microbiology and Infection</u>

Investigation of a Cluster of Sequence Type 22 Methicillin-Resistant Staphylococcus aureus Transmission in a Community Setting. Clinical Infectious Diseases

Colistin exposure as a risk factor for infections caused by inherently colistin resistant Enterobacteriaceae – a case control study. Clinical Microbiology and Infection

Surveillance of antibiotic resistance among common Clostridium difficile ribotypes in Hong Kong. Scientific Reports

Comparison of phenotypic and WGS-derived antimicrobial resistance profiles of *Salmonella enterica* serovars Typhi and Paratyphi. <u>Journal of Antimicrobial Chemotherapy</u>

The Emergency Medical Service Microbiome. Applied and Environmental Microbiology

Helicobacter pylori resistance in the Netherlands: a growing problem? Netherlands Journal of Medicine

Surgical site infections after lung resection: a prospective study of risk factors in 1,091 consecutive patients. <u>Journal of Thoracic Disease</u>

Treatment and diagnosis

MIC-based dose adjustment: facts and fables. Journal of Antimicrobial Chemotherapy

Comparing the Outcomes of Adults With Enterobacteriaceae Bacteremia Receiving Short-Course Versus Prolonged-Course Antibiotic Therapy in a Multicenter, Propensity Score-Matched Cohort. Clinical Infectious Diseases

Appropriate and Inappropriate Treatment of Acute Otitis Media in the Pediatric Emergency Department. Pediatric Infectious Diseases Journal

2017 Infectious Diseases Society of America Clinical Practice Guidelines for the Diagnosis and Management of Infectious Diarrhea. <u>Clinical Infectious Diseases</u>

Trial Evaluating Ambulatory Therapy of Travelers' Diarrhea (TrEAT TD) Study: A Randomized Controlled Trial Comparing 3 Single-Dose Antibiotic Regimens With Loperamide. Clinical Infectious Diseases

Predictors of pneumonia in lower respiratory tract infections: 3C prospective cough complication cohort study. <u>European Respiratory Journal</u>

Effect of Oral Capsule—vs Colonoscopy-Delivered Fecal Microbiota Transplantation on Recurrent Clostridium difficile Infection. JAMA

Clinicians need to decrease antibiotic use in previously healthy infants hospitalised with bronchiolitis. Acta Paediatrica

Increasing Evidence of the Nephrotoxicity of Piperacillin/Tazobactam and Vancomycin Combination Therapy—What Is the Clinician to Do? Clinical Infectious Diseases

Bichat guidelines for the clinical management of plague and bioterrorism-related plague. Eurosurveillance

Antibiotic administration in the ambulance? <u>Lancet Respiratory Medicine</u>

Accuracy and reproducibility of the Etest to detect drug-resistant *Neisseria gonorrhoeae* to contemporary treatment. <u>Journal of Medical Microbiology</u>

Persistence of Penicillin Allergy. JAMA

Persistence of Penicillin Allergy—Reply. JAMA

Rapid detection of Group B streptococcus directly from vaginal—rectal specimens using liquid swabs and the BD Max GBS assay. Clinical Microbiology and Infection

Phage Therapy's Role in Combating Antibiotic-Resistant Pathogens. JAMA

Phage therapy: revival of the bygone antimicrobial. Lancet

Prevention and intervention

Impact of Quality Bundle Enforcement by a Critical Care Pharmacist on Patient Outcome and Costs.

<u>Critical Care Medicine</u>

Bacterial Infections After Burn Injuries: Impact of Multidrug Resistance. Clinical Infectious Diseases

Clinical Characteristics and Risk Factors of Long-Term Central Venous Catheter-Associated Bloodstream Infections in Children. Pediatric Infectious Disease Journal

Improving Antibiotic Stewardship: A Stepped-Wedge Cluster Randomized Trial. <u>American Journal of Managed Care</u>

Long-Term Impact of an Educational Antimicrobial Stewardship Program on Hospital-Acquired Candidemia and Multidrug-Resistant Bloodstream Infections: A Quasi-Experimental Study of Interrupted Time-Series Analysis. <u>Clinical Infectious Diseases</u>

No-Touch Disinfection Methods to Decrease Multidrug-Resistant Organism Infections: A Systematic Review and Meta-analysis. <u>Infection Control & Hospital Epidemiology</u>

Identification of Clostridium difficile Reservoirs in The Patient Environment and Efficacy of Aerial Hydrogen Peroxide Decontamination. <u>Infection Control & Hospital Epidemiology</u>

Urinary Tract Infection Antibiotic Trial Study Design: A Systematic Review. Pediatrics

Randomized Trials in Children With UTI. Pediatrics

The Impact of a Carbapenem-Resistant Enterobacteriaceae Outbreak on Facilitating Development of a National Infrastructure for Infection Control in Israel. Clinical Infectious Diseases

A Coordinated and Sustained Response to the Threat of Antibiotic Resistance Is Critical: Lessons Learned From Israel. <u>Clinical Infectious Diseases</u>

Microbiology

Antibiotic Resistome in a large-scale healthy human gut microbiota deciphered by metagenomic and network analyses. <u>Environmental Microbiology</u>

Intrapartum antibiotics for GBS prophylaxis alter colonization patterns in the early infant gut microbiome of low risk infants. Scientific Reports

Microbial colonization of the periodontal pocket and its significance for periodontal therapy. Periodontology 2000

Other

Why the antibiotic resistance crisis requires a One Health approach. Lancet Infectious Diseases

The Search for 'Evolution-Proof' Antibiotics. Trends in Microbiology

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

Attributable Cost of Clostridium difficile Infection in Pediatric Patients. <u>Infection Control & Hospital Epidemiology</u>

30-day readmission, antibiotics costs and costs of delay to adequate treatment of Enterobacteriaceae UTI, pneumonia, and sepsis: a retrospective cohort study. Antimicrobial Resistance & Infection Control

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.