**M3 Literature Review**

**Period: 13/10/2023 – 24/10/2023**

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Scientific Highlights:

1. p-Cresol Sulfate Is a Sensitive Urinary Marker of Fecal Microbiota Transplantation and Antibiotics Treatments in Human Patients and Mouse Models.
2. Derivation of clinical predictive factors (CHIEF) for first recurrent Clostridioides difficile infection.
3. Factors Associated With Fecal Microbiota Transplant Failure in the Treatment of Recurrent Clostridioides difficile Infection: A Single-Center Retrospective Study.
4. Fecal microbiota transplantation for treatment of refractory or recurrent Clostridioides difficile infection in Taiwan: a cost-effectiveness analysis.
5. Interaction of Clostridioides difficile infection with frailty and cognition in the elderly: a narrative review.
6. Colonic distribution of FMT by different enema procedures compared to colonoscopy - proof of concept study using contrast fluid.
7. Prevalence of Clostridium Difficile Infection (CDI) among Inflammatory Bowel Disease (IBD) Patients in Comparison to Non-IBD Patients in King Abdulaziz Medical City in Jeddah.
8. A Percutaneous Endoscopic Colostomy Tube to the Rescue.

Clostridioides difficile/ Clostridium difficile

1. Acquisition site-based remodelling of Clostridium perfringens- and Clostridioides difficile-related gut microbiota.
2. Orthodontic Internal Resorption Assessment in Periodontal Breakdown-A Finite Elements Analysis (Part II).
3. Editorial: Global excellence in inflammatory diseases: Latin America 2021.
4. The Association between Mediated Deprivation and Ovarian Cancer Survival among African American Women.
5. The mental functioning of school-age children in Poland since the outbreak of war in Ukraine and during the subsequent refugee crisis.
6. Clostridioides difficile infection drives neuronal inflammation.
7. Prevalence and genetic diversity of Blastocystis sp. among autochthonous and immigrant patients in Italy.
8. Fabrication of a reusable electrochemical platform based on acid-responsive host-guest interaction with Î²- cyclodextrin.
9. The RgaS-RgaR two-component system promotes Clostridioides difficile sporulation through a small RNA and the Agr1 system.
10. COVID-19 Australia: Epidemiology Report 78.
11. COVID-19 Australia: Epidemiology Report 77.
12. COVID-19 Australia: Epidemiology Report 76.
13. Evaluation of an in vitro experimental platform of human polarized intestinal epithelial monolayers for the hazard assessment of insecticidal proteins.
14. Nursing students perspectives of psychosocial care: cross-sectional study.
15. Vascular Grafts: Technology Success/Technology Failure.
16. New Phenylthiazoles: Design, Synthesis, and Biological Evaluation as Antibacterial, Antifungal, and Anti-COVID-19 Candidates.
17. Using notifications data to increase hepatitis C testing and treatment rates in Queensland.
18. Enhanced surveillance of notifications of hepatitis C to Queensland Health up to 19 years previously.
19. Erratum to Commun Dis Intell (2018) 2023;47. (https://doi.org/10.33321/cdi.2023.47.46).
20. Considerations about antibiotic management for community-acquired pneumonia: unmet needs and future perspectives.
21. Polyamines and hypusination are important for Clostridioides difficile toxin B (TcdB)-mediated activation of group 3 innate lymphocytes (ILC3s).
22. Preparation and Evaluation of Î²-Cyclodextrin-based Nanosponges loaded with Budesonide for Pulmonary Delivery.
23. Cessation of Antibiotics for Complicated Appendicitis at Discharge Does Not Increase Risk of Post-operative Infection.
24. Extreme Monovalent Ion Selectivity Via Capacitive Ion Exchange.
25. Mesoporous dopamine-modified leaf-like zeolitic imidazolate frameworks derived carbon for efficient capacitive deionization.
26. Constructing ion-transport blockchain by polypyrrole to link CoTi-ZIF-9 derived carbon materials for high-performance seawater desalination.
27. Global and cell type-specific immunological hallmarks of severe dengue progression identified via a systems immunology approach.
28. Association between resistivity index of central retinal artery and severity of diabetic retinopathy.
29. Dataset of exceptional women directors and carbon information disclosures of global energy companies.

Fidaxomicin & Clostridium difficile

Clostridioides difficile vaccine

1. Clinical and Endoscopic Outcomes Through 78 Weeks of Tofacitinib Therapy for Ulcerative Colitis in a US Cohort.
2. Public health response to an outbreak of meningococcal B disease in a secondary school in Far North Queensland.
3. Nanobodies against C. difficile TcdA and TcdB reveal unexpected neutralizing epitopes and provide a toolkit for toxin quantitation in vivo.

Vancomycin & CDI

1. An epidemiological surveillance study (2021-2022): detection of a high diversity of Clostridioides difficile isolates in one tertiary hospital in Chongqing, Southwest China.

CDI

1. Pharmacomagnetography assessment of the prokinetic effect on metronidazole absorption.
2. Quinoline-2-one derivatives as promising antibacterial agents against multidrug-resistant Gram-positive bacterial strains.
3. Cessation of Rectal Screening for Vancomycin-Resistant Enterococci: Experience from a Tertiary Care Hospital from TÃ¼rkiye.
4. Antimicrobial Prophylaxis for Percutaneous Nephrolithotomy: Contemporary Practice Patterns.
5. Genomic Characterization of 2 Cutibacterium acnes Isolates from a Surgical Site Infection Reveals Large Genomic Inversion.
6. Ventilator-Associated Methicillin-Resistant Staphylococcus aureus (MRSA) Pneumonia in a Patient with a Negative MRSA Nasal Swab.
7. Fosfomycin-induced agranulocytosis: a case report and review of the literature.
8. Nephrotoxicity caused by colistin use in ICU: a single centre experience.
9. Design of experiment-oriented development of solvent-free mixed micellar chromatographic method for concomitant determination of metronidazole and ciprofloxacin hydrochloride.
10. Pleural penetration of amoxicillin and metronidazole during pleural infections: an ambispective cohort study.
11. Serum Concentration of Continuously administered Vancomycin influences Efficacy and Safety in Critically Ill Adults: A Systematic Review.
12. Cefepime vs Piperacillin-Tazobactam in Adults Hospitalized With Acute Infection: The ACORN Randomized Clinical Trial.
13. Comparison of ointment-based agents after excisional procedures for hemorrhoidal disease: a network meta-analysis of randomized controlled trials.
14. Successful multidisciplinary treatment of the rare pathology of vulvar Crohn's disease.
15. Eosinophilic enteritis presenting as intestinal obstruction: case report and review of the literature.
16. A case of Vagococcus fluvialis isolated from the bile of a patient with calculous cholecystitis.
17. Bifidobacteria metabolize lactulose to optimize gut metabolites and prevent systemic infection in patients with liver disease.
18. Therapeutic Drug Monitoring-Guided Vancomycin Therapy of a Pediatric Patient after Liver Transplantation: a Case Report.
19. The Antibacterial Resistance Leadership Group: Scientific Advancements and Future Directions.
20. Priorities and Progress in Gram-positive Bacterial Infection Research by the Antibacterial Resistance Leadership Group: A Narrative Review.
21. Sociodemographic distributions and molecular characterization of colonized Enterococcus faecium isolates from locality hospitals in Khartoum, Sudan.
22. Microbiome-transcriptome analysis reveals that dietary supplementation with macleaya cordata extract alters multiple immune pathways with minimal impact on microbial structure.
23. Antimicrobial and antibiofilm effects of essential fatty acids against clinically isolated vancomycin-resistant Enterococcus faecium.
24. Impact of implementing a vancomycin protocol to reduce kidney toxicity: A comparative study.
25. Drain blockage by topical vancomycin powder-a case report of a potentially catastrophic complication in spine surgery.
26. Case report: isolation of Hydrogenophaga from septic blood culture following near-death drowning in lakewater.
27. Indole-based aryl sulfides target the cell wall of Staphylococcus aureus without detectable resistance.
28. Sterile soil mitigates the intergenerational loss of gut microbial diversity and anxiety-like behavior induced by antibiotics in mice.
29. Clinical study of drug-loaded calcium sulfate in the treatment of hematogenous osteomyelitis in children.
30. Aortic endograft infection by Mycobacterium abscessus subsp. massiliense with acquired clarithromycin resistance: a case report.
31. Evidence of bisphosphonate-conjugated sitafloxacin eradication of established methicillin-resistant S. aureus infection with osseointegration in murine models of implant-associated osteomyelitis.
32. The distribution and the antimicrobial susceptibility features of microorganisms isolated from the burn wounds; a ten-year retrospective analysis.
33. [Analysis of Pathogenic Bacterial Spectrum, Drug Resistance and Risk Factors for Mortality of Bloodstream Infection in Patients with Hematologic Diseases].
34. Concerning emergence of a new vancomycin-resistant Enterococcus faecium strain ST1299/CT1903/vanA at a tertiary university centre in South-Germany.
35. [Translated article] Oral vancomycin in a pediatric patient with primary sclerosing cholangitis and inflammatory bowel disease.
36. Successful Eradication of a Highly Resistant Elizabethkingia anophelis Species in a Premature Neonate With Bacteremia and Meningitis.
37. Trial of Vancomycin and Cefazolin as Surgical Prophylaxis in Arthroplasty.
38. Endophthalmitis Management Study-A Prospective Randomized Clinical Trial on Postoperative Endophthalmitis Management in India: An Interim Analysis. Endophthalmitis Management Study Report #3.
39. A Staphylococcus capitis strain with unusual bacteriocin production.
40. Volume of distribution as an early predictor of vancomycin-induced AKI in critically ill patients.
41. Infections associated with clozapine: a pharmacovigilance study using VigiBase(Â®).
42. Vancomycin and Gentamicin Removal with the HA380 Cartridge during Experimental Hemoadsorption.
43. Development of teixobactin analogues containing hydrophobic, non-proteogenic amino acids that are highly potent against multidrug-resistant bacteria and biofilms.
44. Antimicrobial-loaded biodegradable nanoemulsions for efficient clearance of intracellular pathogens in bacterial peritonitis.
45. Arginase2 mediates contrast-induced acute kidney injury via facilitating nitrosative stress in tubular cells.
46. Production of all-male non-transgenic zebrafish by conditional primordial germ cell ablation.
47. Methicillin-Resistant Staphylococcus aureus and Coagulase-Negative Staphylococcus from School Dining Rooms in Argentina.
48. Clinical significance of Nosocomiicoccus ampullae isolated from blood cultures.
49. [Surveillance of bacterial resistance in children aged 0-14 years from 2018 to 2022].
50. Comparative outcomes of the pathogen in cultured Jones tubes used in lacrimal bypass surgery according to follow up periods.
51. A Systemic Lupus Erythematosus Patient with Cutaneous Mycobacterium haemophilum Infection under Belimumab Treatment: A Case Report.
52. The Effect of Topical Antibiotic Powder Application in the Emergency Department on Deep Fracture Related Infection in Type III Open Lower Extremity Fractures.
53. Subplenones A-J: Dimeric Xanthones with Antibacterial Activity from the Endophytic Fungus Subplenodomus sp. CPCC 401465.
54. External validation of obese and critically ill vancomycin population pharmacokinetic models in critically ill obese patients.
55. Potential Effects of Alpha-Glycosyl Isoquercitrin on Memory by Altering the Gut Microbiota-Blood-Brain Axis in Mice.
56. RavA-ViaA antibiotic response is linked to Cpx and Zra2 envelope stress systems in Vibrio cholerae.
57. Prevalence of antibiotic resistance in lactic acid bacteria isolated from traditional fermented Indian food products.
58. Effectiveness, safety, and cost of vancomycin and linezolid in Kuwait: A retrospective cohort study.
59. Pyelo-hepatic abscess caused by staghorn stone infection: a case report.
60. New synergistic antibacterial mechanism of bulky mixed Ti/w hetero-polyoxometalates composed of multi lacunary Keggin structure with oxacillin against vancomycin intermediate-resistant Staphylococcus aureus.
61. Gelatinase-responsive biodegradable targeted microneedle patch for abscess wound treatment of S. aureus infection.
62. Adjuvant intra-articular vancomycin for recalcitrant Staphylococcal prosthetic joint infections of the knee.
63. Global impact of antibacterial resistance in patients with hematologic malignancies and hematopoietic cell transplant recipients.
64. In situ patch and repeated open application test for fixed drug eruption: a multicenter study.
65. Antimicrobial resistance pattern of anaerobic bacteria causing lower respiratory tract infections.
66. Case report: isolated prevotella intermedia causing intracranial infection detected using metagenomic next generation sequencing.
67. Potent Rifampicin derivatives can clear MRSA infections at single low doses when concomitantly dosed with Vancomycin.
68. Potential of arterial spin labeling in elucidating the pathogenesis of the splenium of the corpus callosum and cerebellar dentate nucleus in encephalopathy.
69. Antibiotics attenuate diet-induced non-alcoholic fatty liver disease without altering intestinal barrier dysfunction.
70. Maternal Group B Streptococcus Prophylaxis Improvement Using an Electronic Medical Record Dynamic Order Set.
71. Core genome multilocus sequence typing of Clostridioides difficile to investigate transmission in the hospital setting.
72. Shorter versus longer duration of antibiotic treatment in children with bacterial meningitis: a systematic review and meta-analysis.
73. Efficacy of systemic use of antibiotics as an adjunct to non-surgical treatment of peri-implantitis: a meta-analysis of randomized controlled trials.
74. Knowledge and attitude of dental students regarding etiology, diagnosis, and treatment of peri-implantitis.
75. Epidemiological and microbiological profiles of microbial keratitis in a tertiary eye center in Eastern India (Bihar).
76. Performance evaluation of PdO/ CuO TiO2 photocatalytic membrane on ceramic support for removing pharmaceutical compounds from water.
77. Interactions of metronidazole and chloramphenicol with myoglobin: Crystal structure of a Mb-acetamide product.
78. Hemophagocytic Lymphohistiocytosis and Pancreatic Cancer: A Rare Association.
79. Efficacy of Sequential Therapy as the First-Line Treatment in the Eradication of Helicobacter pylori.
80. Occult Bacteremia Caused by Enterococcus-Associated Pyuria in an Elderly Man.
81. Occurrence of Virulence Genes among Methicillin-Resistant Staphylococcus aureus Isolated from Subclinical Bovine Mastitis.

FMT/ Fecal Microbiota Transplant

Competitors

1. Industrialized human gut microbiota increases CD8+ T cells and mucus thickness in humanized mouse gut.

CDAD

1. Detection of multiple human enteropathogens in Norway rats (Rattus norvegicus) from an under-resourced neighborhood of Vancouver, British Columbia.
2. Research progress on the regulation of oxidative stress by phenolics: The role of gut microbiota and Nrf2 signaling pathway.
3. Enteric Infection at Flare of Inflammatory Bowel Disease Impacts Outcomes at 2 Years.

CMC

Guidelines

1. Infections After Adoption of Antibiogram-directed Prophylaxis and Intracorporeal Urinary Diversion for Robot-assisted Radical Cystectomy.
2. Systematic review of ceftaroline fosamil in the management of patients with methicillin-resistant Staphylococcus aureus pneumonia.
3. Australian recommendations for the management of drug-resistant tuberculosis, 2023.
4. Australian vaccine preventable disease epidemiological review series: tetanus 2003-2019.
5. Re: 'the effect of antibiotic therapy for Clostridioides difficile infection on mortality and other patient-relevant outcomes' by Stabholz et al.

Non-toxigenic C. difficile

MGB

Other news of possible interest