Volume 8, Issue 2 1st March 2017

FIDSSA Quarterly

Newsletter of the Federation of Infectious Diseases Societies of Southern Africa

Contents

This Year's FIDSSA Conference is coming to Cape Town

It's time to get your abstracts ready for the 7th biennial FIDSSA conference, which this year will take place at the new Century City Conference Centre in Cape Town between 7-9 November 2017. We are populating the website (http://www.fidssa.co.za/Congress2017) and registration and abstract submission details are already available. The abstract submission deadline of 31st July 2017 will NOT be extended, so don't lose the opportunity to qualify for the R10,000 first prize for best oral presentation and R5000 for best poster.

FIDSSA Executive Committee

Marc Mendelson (President), Andrew Whitelaw (Secretary Treasurer), Nelesh Govender (President-Elect & SASCM), Gary Reubenson (Secretary Treasurer-Elect), Adrian Brink (Past-President), Chetna Govind (SASCM), Joy Cleghorn (ICSSA), Nicolette du Plessis & Mark Cotton (SASPID), John Black & Tom Boyles (IDSSA), Salim Parker & Garth Brink (SASTM), Marcelle le Roux & Frans Radebe (STDSSA), Lea Lourens (FIDSSA Administrator – info@fidssa.co.za)

Bloemfontein introduces Faecal Microbiota Transplantation for recurrent *C. difficile* infection

In the last quarter, a well-known Bloemfontein ID specialist has introduced faecal microbiota transplant (FMT), performing four faecal transplants for resistant or recurrent Clostridium *difficile* infection (rCDI). Dr Cloete Van Vuuren was consulted on four occasions over the last few months for advice regarding patients with recurrent *Clostridium difficile*- associated diarrhea, where he performed stool transplantation from donor family members– curing all four patients within hours.

Relapse of *Clostridium difficile Infection* is a common clinical problem *and* occurs in 10-25% of patients treated with standard therapy such as metronidazole and/or vancomycin. Whilst agents such as fidaxomicin and rifaximin are available for the treatment of recurrent disease – these agents remain expensive and the risk of subsequent recurrence after a second course of antibiotic therapy in rCDI is up to 65% in some studies [(1)].

Substantial evidence – including randomized controlled trials and meta-analyses – exists to support the practice FMT for rCDI. Due to significantly higher resolution rates than treatment with vancomycin (90-94% vs 26-31%) FMT is indicated for the treatment of both mild and severe rCDI and its implementation in clinical practice is recommended. [(2)]

Although FMT has widely recognized as a highly effective treatment option for some time, various technical and logistical questions have remained regarding how to safely implement this non-standardized therapy into clinical practice. The **European consensus conference on faecal microbiota transplantation in clinical practice** recently published evidence-based guidelines addressing many of these issues. [(2)] Clear recommendations have been made regarding indications, donor selection, preparation of faecal material, as well as clinical management and faecal delivery. This very useful resource can be found at: http://gut.bmj.com/content/early/2017/01/13/gutjnl-2016-313017.full

In the above cases the indication for FMT was rCDI despite lengthy treatment with vancomycin. A willing family member of each respective patient was identified and screened with a brief clinical history including gastrointestinal, neurological and metabolic disease. Known infection with, or recent exposure to HIV, HBV, HCV and syphilis was excluded. A history of recent antibiotic use or chronic use of proton pump inhibitors was excluded as these could potentially alter the gut microbiota composition of the donor. Potential donors were screened for HIV, HAV, HBV, HCV, HEV, CMV, and EBV by serology. A full blood count, albumin, liver enzymes, urea and creatinine were also done. Donor stool was also screened for C *diff,* salmonella and shigella, as well as helminths and parasites according to local laboratory standard operating protocols. Stool colonization with multidrug resistant Gram negative bacteria was also excluded. On each respective day of transplantation, a donor stool sample was collected using a standard specimen container and taken to the laboratory immediately. A suspension was then made, mixing the stool with 500ml saline, using a laboratory vortex. The solution was then filtered through gauze to remove any solid matter. Gloves and facemask were used during the preparation and the designated area was disinfected with soap and water as well as alcohol once the procedure was completed. In three patients, the solution was then infused via naso-jejunal tube placed during gastroscopy in the endoscopy suite. In one case as the patient had eaten just prior to the planned procedure the solution was instilled via colonoscopy. All patients were then observed for complications for 72hrs. One patient developed fever after the procedure – this was managed expectantly and resolved after 24hrs. In all cases diarrhoea resolved within three days.

FMT is an inexpensive, easy and highly effective treatment for rCDI and can be implemented where appropriate with a willing support team.

Happy Transplanting
The Bloemfontein ID Team

References:

1. A randomized placebo controlled trial of Saccharomyces boulardii in combination with standard antibiotics for Clostridium difficile disease. McFarland LV et al. JAMA. 1994;271(24):1913

2. European consensus conference on faecal microbiota transplantation in clinical practice. G Cammarota et al. *Gut* Published Online First: doi: 10. 1136/gutjnl-2016-31307

South Africa, let's hope…

With the budget speech, SONA 2017, and severe weather conditions in SA (both draught and storms) during the first few weeks of 2017; well, what's left to make 2017 even more challenging? At least the Paediatric ID community has conferences and research outputs to look forward to.

"South African study offers hope against drug-resistant TB" read the news article late February 2017. With the three-drug combination pretomanid, bedaquiline and linezolid, shortened treatment regimens and increased tolerability to drug-resistant TB management seems promising. We look forward to further data from the NIX-TB study. "Meeting the challenge of drug-resistant tuberculosis" workshop hosted by the Lung Infection and Immunity Unit, Division of Pulmonology, UCT Lung Institute, Department of Medicine, University of Cape Town from 24 – 26 March 2017 will be informative and are recommended for healthcare providers working with TB patients, including paediatric patients.

Neonatal, paediatric, and adolescent HIV management remain topical. Elimination of mother to child transmission (eMTCT) and universal test and treat programmes are priorities for the National Department of Health. Co-treatment of HIV and TB in children remains a challenge. This topic will be discussed from a pharmacologist's perspective during the FIDSSA conference in Cape Town in November 2017. Prof Mike Sharland will be dissecting the important topic of antimicrobial resistance and therapeutic options in neonates during the planned FIDSSA meeting, one that should not be missed. The 7th FIDSSA Congress 2017 will be held from 9 – 11 November 2017 at the new Century City Conference Centre, Cape Town.

Further important meetings that members can look forward to in 2017 include:

5th Biennial Congress of the African Society for Immunodeficiencies (ASID) will be held at the Zambezi Sun Hotel, Victoria Falls, Livingstone, Zambia from 12 to 14 April 2017. For more information consult the ASID website: http://www.asid.ma

9th IAS Conference on HIV Science (IAS 2017) on 23-26 July 2017 at the Palais des Congrès in Paris, France. Website: http://www.ias2017.org/ The 9th International Workshop on HIV Pediatrics will be held 21-22 July 2017 before IAS 2017 starts.

10th WSPID conference takes place in Shenzhen, China, from 2 to 5 December 2017. Information on the venue and conference dates will be made public shortly For more information visit the Paediatric Infectious Diseases Society website: http://www.pids.org/ or the conference website http://lp.www2.kenes.com/wspid_2017/ AfSPID will host a dedicated symposium at this conference.

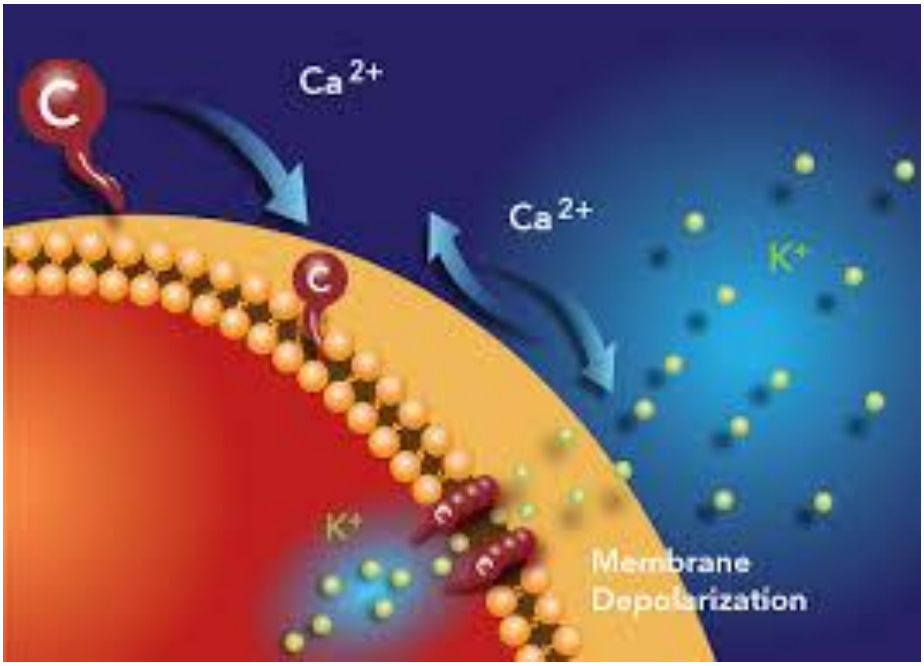
Wishing you a fruitful, hopeful and challenging 2017 from the SASPID team. Helen Keller wrote "Optimism is the faith that leads to achievement. Nothing can be done without hope and confidence."

Nicolette du Plessis

SASCM Guideline for daptomycin use in South Africa - 2017 update

In 2014, SASCM published guidelines on the use of daptomycin in South Africa. These guidelines have been reviewed through consultation and extensive analysis of current literature by the National Advisory Committee on Antimicrobial Susceptibility (NAC),

and SASCM is pleased to announce that the updated 2017 guidelines will be published in SAJID shortly. Daptomycin, a bactericidal agent against most Gram-positive bacteria, belongs to the cyclic lipopeptide class of antibiotics. Its unique mechanism of action is at the cell membrane where it causes rapid depolarization of membrane potential.



Daptomycin is currently registered for use in treatment of complicated skin and soft tissue infections, and right-sided *S. aureus* endocarditis. These guidelines outline the extended, yet appropriate use of daptomycin as empiric and directed therapy which is prudent within the context of antimicrobial stewardship.

SASCM surveillance data

One of SASCMs deliverables has been the daunting task of providing public and private line-list data for selected drug resistant pathogens with geographic as well as patient age to better understand trends in South Africa. The National Department of Health requires SASCM to collect and provide such data in compliance with the WHO GLASS directive. A major step forward was achieved at a recent meeting held in Johannesburg which involved major stakeholders from the public and private sector. After the pre-requisites and limitations of gathering data of this magnitude were discussed extensively by the group, a way forward has been mapped and the aim is to make the 2016 data available shortly. This would mark the first time that data from the private and public sector is collated in a central database and augers well for the future of SASCM surveillance activities.