

FIRST ANNOUNCEMENT



6th FIDSSA Congress

5 – 8 November 2015

Champagne Sports Resort • Drakensberg

KwaZulu Natal • South Africa



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federation of infectious diseases
societies of southern africa

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We are delighted to announce a return to Champagne Sports Resort next November for the 6th FIDSSA conference. Dr John Black, President of IDSSA and Infectious Diseases specialist at Livingstone Hospital, Port Elizabeth, will be the Conference Chair. John will lead an organizing committee with 2 representatives from each of the 6 FIDSSA societies, one senior and one junior practitioner plus content experts and FIDSSA reps. Finding a suitable venue to host the FIDSSA conference is not without its problems. There are many conference venues for <350 delegates, a number that are financially non-viable unless one can guarantee >750, and vanishingly few in between. Although we were hoping to host the conference in PE, the conferencing facility there out-priced itself and its exhibition space was decidedly sub-optimal. Whilst CSR has its challenges, overall, it is a great venue for our conference. We are therefore very happy to return to a venue which proved such a successes in 2013. We hope you will join us!

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The Forgotten PHEIC - Albie de Frey



On 8 August 2014, the WHO declared the Ebola virus disease outbreak in West Africa a Public Health Emergency of International Concern (PHEIC) in accordance with the International Health Regulations (2005). The Ebola Virus Disease (EVD) outbreak started in a remote area of Guinea and the first victim likely was a 2-year-old boy who contracted the virus from an unknown animal source.

At the time of writing in late August 2014, the disease had spread to four countries in West Africa and the hype surrounding it has engulfed the entire world. Apart from the roughly 3 000 people who contracted the virus and approximately 1 500 deaths the outbreak has caused major disruption to travel and commerce across the globe with a nearly incalculable economic cost that will undoubtedly have an impact on the economies of the affected countries and the African continent as a whole for years to come.

EVD poses a very significant challenge to the medical fraternity - it is a zoonosis, there are several different strains, there is no vaccine and no cure. The good news is that it is only spread through direct contact with the infected body fluids of clinically ill people, it is not airborne and it is not found in the environment - soil or water sources.

EVD will not go away in a hurry - it is here to stay - and the people of Africa and those who come here to conduct business will have to learn to live with and manage Ebola just as we live with malaria and HIV / AIDS and tuberculosis. And poor health care infrastructure and provision that sits at the heart of the current cataclysmic outbreak.

In the interim, life goes on and as clinicians, medical politicians and responsible citizens, we should not lose sight of the other on-going health care threats to mankind:

Malaria has not gone away, even if it has been upstaged in the media in recent weeks - malaria still kills $\pm 1\ 700$ people a day as opposed to the $\pm 1\ 500$ people killed by EVD in eight months;

SEASONAL INFLUENZA results in 3 to 5 million cases of severe illness, and approximately 250 000 to 500 000 deaths all over the world – yet seasonal influenza vaccine uptake is, with rare exceptions in the Industrialised World, dismal – in particular in Africa. It is airborne...

YELLOW FEVER is a viral haemorrhagic fever affecting 200 000 people in Africa and South America annually. It kills 30 000 people a year – yet travellers have to be begged and regulated by law to have this safe and effective, freely available vaccine. Mosquitoes, not close contact with a patient, transmit the virus.

...and then there is Polio. The forgotten PHEIC.

POLIO was declared a PHEIC on 5 May 2014, yet no one shrugged. Polio's crippling effects is there for all to see in many countries around the world - mostly so in the countries where it has never been eradicated such as Nigeria, Pakistan and Afghanistan. It continues to maim and kill hundreds of children and some adults around the world in spite of the WHO's best attempts to eradicate it with the help of billions of dollars.

Polio is not a zoonosis - man is the only living reservoir.

There are three different strains of wild poliovirus, of which we have managed to eradicate all but one strain even though the virus is present in the environment - water and sewage - and can be spread by droplets from person to person.

It is vaccine preventable - yet travellers have to be begged and regulated to take the vaccine...

In reaction to the PHEIC, the WHO declared that prospective travellers who are resident in countries that continue to have wild polio in circulation and / or are exporting polio virus, **MUST** or should show proof of adequate primary vaccination **AND** an adult booster in the last 12 months prior to travel.

Few countries and individuals pay any notice...

In the horn of Africa, previously polio free, an outbreak of polio was reported in May 2013 – there were 218 cases in Somalia, Ethiopia and Kenya – yet no-one is considering deferring / cancelling travel to any of these countries for this reason. Why would travellers now avoid Kenya because of the *possibility* of an Ebola case arriving there? (Paris with ample connections to West Africa has at least the same risk but has not received the same “red card”.)

If travellers from countries with wild polio virus are exporting polio and re-infecting other countries - Afghanistan, Pakistan, Nigeria, Syria, Equatorial Guinea, Cameroon, Ethiopia, Iraq, Somalia and Israel - why would travellers originating in other countries, but visiting the affected countries, not export the virus home?

... and indeed they would, which is why several countries - but not South Africa as yet - have determined that, in line with the WHO's recommendation to travellers to the listed countries, travellers should be vaccinated against polio:

“WHO also continues to advise travellers to countries where the polio virus is still circulating to ensure that they have completed the age-appropriate polio vaccine series, according to their respective national immunization schedule. Adult travellers to polio infected countries who have previously received three or more doses of OPV or IPV should also be given another one-time booster dose of polio vaccine.”

From “International Travel and Health”:

All travellers are advised to carry their written vaccination record (patient-retained record) in the event that evidence of polio vaccination is requested for entry into countries being visited. Preferably travellers would use the IHR 2005 International Certificate of Vaccination or Prophylaxis.

The CDC advises that clinicians preparing travellers to polio affected countries should pay attention to polio related *exit* requirements, making it advisable to vaccinate travellers prior to departure from their home country. This is particularly important in the case of long-term travellers, e.g. expatriates on assignment in Nigeria.

Some countries have implemented proof of recent polio vaccination as an entry requirement, including the Kingdom of Saudi Arabia, Australia, India, Syria, Iraq, Brunei and Australia.

This is a drop in the ocean against the countries that have fallen over their diplomatic brogues to implement travel restrictions and bans on travellers to and from Ebola affected and “rumoured-to-be-at-risk” countries. (For a reference see any street pole!)

Yet ignoring the Polio Endgame could cost the world far more than the current Ebola outbreak, disastrous though it may be.

If polio is allowed to run its course, modelling research has suggested that failure to eradicate polio would result in at least 200,000 new cases of polio a year, with the greatest burden in countries with poor routine immunization systems. The lucky 1% of these cases will die, the rest will spend their lives crippled with severely limited employment opportunities in a world where large parts of the population is dependent on physical labour and even in many so-called ‘developed countries’ persons with physical disabilities find it difficult to compete in the job market.

Eradicating polio will produce important economic benefits: A 2010 study estimated that the Global Polio Eradication Initiative’s efforts will generate net benefits of US\$ 40-50 billion for the world’s poorest countries, largely in savings from avoided treatment costs for paralytic polio and in gains in productivity. The benefits of a healthy workforce with increased productivity should resonate well with the government of South Africa and most other countries in the world...

The enhanced delivery of other health interventions, broader disease surveillance capacity and improved vaccine delivery systems created by polio eradication efforts add to the economic benefits.

As medical practitioners in general and travel health practitioners in particular in both the Public AND Private sector, we have an undeniable duty to educate and protect individual travellers as well as the general public with regards every infectious disease related public health threat: The dramatic ones that sweep the world like the Black Death of old and present day Ebola, but more so on the ever present, unglamorous diseases that lurk amongst us or sneak back in an unguarded house like a Biblical “thief in the night”.

One thousand five hundred deaths this year or two hundred thousand crippled children and adults tomorrow?

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Some things the Cert ID can’t prepare you for - John Black

The unprecedented Ebola outbreak in West Africa has created much panic around the world and in South Africa has resulted in television appearances of Prof Blumberg with the Honorable Health Minister, a review of the National VHF protocols, emergency information sessions to improve training and create awareness, and travel to and from the affected countries has now being limited. It has sent many ID physicians (especially those in designated hospitals) back to the books to brush up on management and to review case definitions to make sure all is in order in the event of an Ebola Virus case.



Needless to say, any travelers from any part of West Africa are now considered suspects to most people. This has resulted in a large number of calls from panicking officials to centres asking for information on who should be tested, quarantined or isolated. The majority of cases are generally easy to deal with, but occasionally there are cases that defy the usual risk assessment of exposure, incubation period and symptoms.

I was recently asked to review some suspected Ebola cases, which, as usual occurred on a Friday. There was a container ship that had arrived from Abidjan in the Ivory Coast, and the Port Health authorities were informed that there were 3 sick stowaways on board. They had left Abidjan, Ivory Coast, 8 days ago having previously docked in San Pedro, also in the Ivory Coast, but close to on Liberian border within the two weeks prior to arriving. It was unclear where the stowaways had boarded the vessel, but it was conceivable (albeit unlikely!) that they could have made their way from Liberia onto the boat and down to South Africa within the incubation period. The symptoms relayed from the port health authorities included "fever and vomiting" of an unknown duration.

The difficulties with communication arose because the sailors were of Chinese origin and only the captain could converse in broken English. The port authorities were useful with English, Xhosa and Afrikaans and the stowaways were French speaking – with the only English word uttered being "fever" – This was probably induced by the Port Health authorities arriving in full PPE to interview them and assess their symptoms. Port health was unable to make a clear assessment other than "they looked fine, but one says he has a fever", and in the absence of a thermometer was unable to verify whether this was true or not. I was then asked to assess the stowaways to exclude Ebola Virus, who had now been quarantined on the boat, along with all the sailors and containers.

Despite the fact that it was highly unlikely, it was decided that a trial run of how the port health authorities handled the matter would be undertaken. I was collected at the harbour entrance and taken to the ship directly. A range of PPE was available in the boot of the car, some blood taking equipment and Clorox style hand disinfectant. I was taken up to the captain's office to gown up, and was greeted by Chinese sailors in their version of PPE, which included hard hats, dark glasses, surgical masks and woolen gloves. Having donned the PPE, I was escorted to the cabin to examine the stowaways. Their exposure to people since docking was initially the YMCA looking sailors and then people fully gowned in PPE. They were clearly frightened and rather perplexed at the fuss as were all asymptomatic and appeared completely well, with the vomiting having stopped now they were docked.

I was given blood tubes and a vacutainer needle, without a barrel, to take blood, and after much scurrying around a barrel was procured to complete the procedure. Having completed the assessment, removal of the PPE was followed by the realization that the blood tubes had not been labelled and that there was no appropriate packing for them. Donning a second set of gear (knowing that they were asymptomatic and very unlikely to have Ebola!) was done to label the tubes and we departed to deliver the specimens to the informed laboratory.

In the end we did make the diagnosis of a non-falciparum malaria in one stowaway with a low platelet count, which was sorted out before sending the ship and stowaways on their way. The lessons from this escapade were multiple however.

Lesson 1:

The spread of the Ebola Virus in West Africa is not just about poor infrastructure, but also has its roots in cultural beliefs and superstitions, which was epitomized by the denial experienced by the patient who flew into Lagos. This denial resulted in further transmission and deaths. A simple screening tool of exposures is not always accurate when the disease has associated stigma and cultural superstitions and people may be hiding both exposure and symptoms for multiple reasons. In

this case, the desire to avoid deportation and obtain a form of “medical asylum” made the assessment very difficult.

Lesson 2:

The likelihood of imported Ebola is still small and other travel related diseases are more common – malaria in this case.

Lesson 3:

Despite the low risk of importation, being poorly prepared is a recipe for disaster. Even if the end isolation unit has the best training, if the initial assessment areas are poorly trained and informed, panic causes unnecessary stress and exposure risks making transmission a possible event prior to formal isolation being instituted. It is better to be over prepared than bumble through the process in a clumsy fashion. Proper equipment and processes should be in place ahead of time and trial runs are a very useful way of finding out where the problems are.

Lesson 4:

Donning and removing enhanced PPE is not a simple procedure. No-one should pass their Cert(ID) without proving, in a practical demonstration, their proficiency in this process. I hope we are all well prepared for “nothing”.

Asymptomatic Sexually Transmitted Infections in rural South Africa - A neglected field? -Frans Radebe

Sexually Transmitted
Diseases Society
of Southern Africa

Prevalence data have a key role in control strategies for HIV and STIs. Moreover, comprehensive baseline information on the epidemiology of STIs, the proportion of symptomatic and asymptomatic infections and other associated factors are essential for the design, implementation and monitoring of successful targeted interventions, which are important in reducing the incidence/prevalence of HIV infection¹. The South African National Strategic Plan (NSP) for HIV and STIs and TB (2012-2016) proposes that a 50% decrease in the number of new HIV infections should be a key outcome measure to evaluate the impact of current multi-component interventions on the HIV epidemic.

The NSP highlights the importance of sexually transmitted infections (STIs) as co-factors for HIV transmission and recognizes that STI patients and their partners remain a high risk group for HIV acquisition. As recognized early in the HIV epidemic, STIs enhance transmission in resource-limited settings and there is evidence that improved STI control reduces HIV transmission².

The HIV epidemics occurring in Southern Africa region is mainly promoted by multiple factors including the high prevalence of STIs (6) and the ongoing disruptive effects on the continent of inequality and migrant labour systems^{10,11}. The adoption of syndromic STI management in South Africa in 1995 with the approach aiming to diagnose and treat symptomatic STIs is however, not a tool for the diagnosis of asymptomatic infections. There are potential benefits to be gained from strengthening STI screening activities within existing South African treatment programmes³.

Screening-based approach to the detection and treatment of STIs is cost-saving in terms of preventing new HIV infections⁵. Studies on STI prevalence in South Africa focused on patients attending STI clinics in urban cities whereas the infection rates in those attending the small primary health centres, situated in the peripheral areas away from big cities and catering to the community has not received the same attention.

A few community-level studies have been undertaken but the data are relatively patchy and incomplete⁷. Most of the epidemiological data have been obtained from prevalence studies carried out in selected populations¹³. However, studies on STIs in asymptomatic rural population are almost non-existent. All confirmed that both chlamydial and gonococcal infections were frequently asymptomatic among women and that the rates of detection of these organisms does not vary significantly when sampling women presenting at STI, family planning or ante-natal clinics^{6,7}.

When comparing urban and rural clinic attenders in these studies, infection rates tended to be higher among urban than rural dwellers, with more asymptomatic infection occurred among rural rather than urban dwellers. In this dissertation, by far the largest burden of disease among both men and women were among those who would not have sought treatment in the near future, thus increasing the likelihood of the ongoing spread of infection. The studies indicated that asymptomatic and “unapparent infections” (those which were symptom-free but could be demonstrated on examination) in both men and women are of prime importance in the epidemiology of these infections, enabling them to be maintained at a high level of endemity in the general population.

Migration of people from rural to urban area and vice versa, may play a role because though migration confers economic benefit to migrants and their household, the negative consequences on HIV epidemic are well-documented, with ample historic evidence that HIV spread between urban area and from urban to rural areas via corridors of population movements^{12,13}.

Some of the reasons of lack of data on asymptomatic infections may be among others, lack of laboratory diagnostic facilities, limited resources, and poor recognition of reproductive tract infections by the medical profession as a major public health problem, stigma and discrimination associated with STIs and poor attendance of STI patients in clinics.

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Infection Prevention Control measures for Ebola Virus Disease



Infection Control
Society of
Southern Africa

On the 26th of August the World Health Organisation (WHO) stated that the current outbreak of Ebola virus disease (EVD) in West Africa is “unprecedented in many ways, including the high proportion of doctors, nurses, and other healthcare workers (HCWs) who have been infected”.¹

EVD is a highly infectious and fatal disease with a mortality of up to 90%.¹ The case fatality rate of the current outbreak in West Africa is 53%.¹ Transmission can however be prevented. EVD is spread through **direct contact** with body fluids such as blood, saliva, urine and semen of an infected person and through contact with contaminated surfaces or equipment, including linen soiled by body fluids from an infected person. The Ebola virus can be relatively easily destroyed with heat, alcohol-based products or sodium hypochlorite at appropriate concentrations.²

More than 240 HCWs of Guinea, Liberia, Sierra Leone and Nigeria have been infected to date and more than 120 have died. There are several contributing factors for the large number of infected healthcare workers. These factors include the following

- Limited supplies of personal protective equipment (PPE)
- Inadequate training in Standard Precautions
- Inadequate use of PPE and
- Incorrect removal of PPE
- Too few medical personnel
- Poor public health infrastructure²

:²These factors highlight the importance of adequate IPC practices. Effective IPC practices can protect HCWs and stop the transmission of the disease. In August 2014 the WHO published *Interim Infection Prevention and Control guidance for care of patients suspected or confirmed Filovirus haemorrhagic fever in healthcare settings with focus on Ebola*.³

The key infection prevention and control (IPC) messages from the guideline are:

1. Apply standard precautions at **all times for all patients** when providing care, regardless of the signs and symptoms with which the patients' present.
2. Isolate patients with a suspected or confirmed viral haemorrhagic fever (VHF) in a single room or cohort them in a dedicated area.
3. Ensure dedicated equipment.
4. Restrict access to the isolation room.
5. Dedicated personnel need to work in the isolation area and they should not be allowed to work with other patients.
6. All personnel entering the isolation room must wear adequate PPE and perform hand hygiene prior to donning PPE and after the removal of PPE.
7. As a minimum, PPE must include; gloves, gown/protective suit, boots/closed shoes with over-shoes, a mask and eye protection (for splashes and aerosols).
8. Do not re-use contaminated PPE.
9. Hand hygiene is essential and of vital importance. Hand hygiene needs to be performed according to the "5 Moments of hand hygiene" of the WHO, as well as after leaving the isolation area and after removal of PPE.
10. Ensure injection safety and safe disposal of sharps. Limit the taking of blood specimens.
11. Ensure regular and rigorous environmental cleaning, decontamination of surfaces and equipment.
12. Management of contaminated linen is important. If linen cannot be processed safely, it must be incinerated.
13. Waste must be handled with extreme caution. PPE must be worn when waste is removed. Waste needs to be incinerated immediately, following collection.
14. Laboratory specimens need to be handled with care, packed securely and processed safely in a special laboratory at the National Institute for Communicable Diseases (NICD).
15. Family should not be allowed to touch the deceased.
16. All contacts need to be traced and monitored and all HCWs exposed to blood and body fluids of suspected or confirmed VHF patients need to be isolated and monitored.^{3,4}

Although South Africa has no confirmed cases of EVD to date, many South Africans are working in the affected areas in West Africa, including healthcare workers.

It is important that all hospitals are prepared to manage patients with EVD. The NICD has developed and regularly update, an EVD case definition, guidelines for the management of laboratory specimens as well as various other information leaflets and frequently asked questions. The National Department of Health and other role-players have provided training sessions for the management of patients with EVD and the donning and removal of PPE.

South African health care facilities' readiness will only truly be determined if we are faced with the admission of a case of EVD.

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NICD Special Pathogens Course for ID trainees goes viral



This last July saw the latest Special Pathogens Course arranged by Profs Blumberg and Freaan at the evergreen campus of the National Institute of Communicable Diseases (NICD) in Johannesburg. Infectious Diseases trainees from around the country converge for a 5-day intensive schedule of lectures and interactive sessions interspersed with lively practical sessions and guided tours of the laboratories and facilities of the NICD.

Due to our day-to-day ID experience being dominated by HIV and TB medicine, the course aims to fill these voids by focussing on core topics within travel and tropical medicine. The amount of ground to cover is certainly enormous – yet, Profs Blumberg and Freaan effortlessly cover the spectrum with engaging and entertaining case discussions based on their vast collective experience.

Each ID trainee was given the opportunity to contribute to the course by presenting an interesting case from his or her base hospital. The stimulating review of the patient would set the tone for the next session, the foundation upon which the lectures would build. It was encouraging to note that despite the varied working environments around the country we all face similar diagnostic challenges and management conundrums. We realised that as juniors within the greater ID community, we learn not only from our mentors but also from our peers.

Certainly one of the great strengths of the course, and a major highlight, is the chance to be involved in the up-to-the-minute consults coming through on the NICD hotline/ Prof Blumberg's cellphone. The ongoing Ebola outbreak in West Africa definitely added extra gravitas and depth to each clinical scenario. The skill in determining the differential diagnosis and the initial work-up of these vexing cases is a fundamental component of what it is to be an ID specialist. The real-time consults help us refine the subtleties of combining epidemiology, the clinical findings and investigations to formulate the diagnosis.

The visit to the BSL4 Special Pathogens Unit where the viral haemorrhagic fever/ arbovirus testing is conducted gave us greater insight into the fascinating depth of our chosen field and was a fitting way to end off an invigorating course.

A simple step-by-step guide to the management of hepatotoxicity to anti-tuberculosis treatment



Raziya Bobat, Katija Dawood.

The Paediatric Infectious Diseases team frequently gets the following query: "we have a child on TB treatment and his/her liver enzymes are elevated; please advise".

In response to this, we take you through the steps in managing such a child.

There are several differing options available, depending on which guidelines you choose to follow. Most are pretty similar, with a few minor differences. The 3 first-line TB drugs most likely to cause hepatic toxicity are Rifampicin, INH, and Pyrazinamide. Rifampicin can cause an elevated bilirubin without elevation of enzymes.

If the child is on anti-TB drugs only:

1. Confirm that the liver enzymes are elevated
2. Check which enzymes are elevated (transaminases and /or gamma GT).
3. Determine the level of elevation of the enzymes (>3X upper limit of normal (ULN) or >5X ULN)
4. Check whether the bilirubin is also elevated
5. Determine the level of the bilirubin elevation
6. Consider other causes of hepatitis
7. NB: an elevated Gamma GT does NOT equate to hepatic toxicity
8. If enzymes **>3X ULN and symptomatic** (nausea, vomiting, abdominal pain, jaundice: **STOP ALL ANTI- TB DRUGS**)

9. If enzymes **<5X ULN and asymptomatic**, continue TB drugs and monitor closely
10. If enzymes **>5X ULN: STOP ALL ANTI-TB DRUGS**
11. If it is considered unsafe to stop all TB drugs, continue with a liver –friendly regimen
12. Monitor the liver enzymes closely
13. Wait for the liver enzymes to return to normal (or at least to < 2X normal)
14. Use a step-wise approach for the re-introduction of Rifampicin, INH and Pyrazinamide.
15. Begin with Rifampicin (normal dose)
16. After 3-4 days check liver enzymes.
17. If enzymes have gone up again, stop Rif, and DO NOT re-introduce.
18. If enzymes remain normal, add INH (normal dose).
19. After 3-4 days check liver enzymes.
20. If enzymes have gone up again, stop INH, and DO NOT re-introduce.
21. If enzymes remain normal and patient well, continue with first line TB drugs, excluding Pyrazinamide.
22. The re-introduction of PZA is controversial; it is thought that PZA should never be re-introduced as it can be potentially fatal. However, some believe that PZA can be re-introduced if the patient did not have jaundice in addition to elevated enzymes.
23. If enzymes go up after both Rif and INH, the patient must continue on a liver friendly TB regimen (Amikacin/Ethambutol/Moxifloxacin)

If the child is on ART as well as TB drugs at the time that hepatotoxicity is diagnosed:

1. If the hepatitis is mild (<5X ULN and asymptomatic): continue ART and monitor closely
2. If enzymes >3X ULN and symptomatic or enzymes >5X ULN, stop ART.
3. If elevated bilirubin only: continue ART, but monitor closely
4. NB: if child on NNRTI-based regimen, stop the NNRTI first, followed by the NRTIs after 5 days.

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SASCM News



The SASCM National Antimicrobial Committee (NAC) recently met to discuss the use of daptomycin, a recently launched antimicrobial agent. Ensuing from this meeting, a SASCM guideline for appropriate use of daptomycin was developed. The committee felt that the registered indications for daptomycin were too restrictive and that the literature supports its use outside of these indications. The guideline is based on available literature and the opinions of NAC members. It has been posted on the FIDDSA website at the following IP address: http://www.fidssa.co.za/images/SASCM_Daptomycin_guidelines_2014.pdf

Any comments or suggestions relating to the guideline are welcome and can be submitted to the following email: warren.lowman@wits.ac.za.

More news relating to daptomycin is a request from EUCAST for consultation on whether enterococcal breakpoints should be published for enterococci (see excerpt from request below). There are already plans by SASCM, under the guidance of NAC, to adopt the EUCAST guidelines in the near future. This request provides SASCM an opportunity to contribute to the development of these guidelines. Please submit any comments by the 5th September to the following email: warren.lowman@wits.ac.za

Request from EUCAST secretariat:



Consultation on whether EUCAST should publish daptomycin breakpoints for enterococci

EUCAST is occasionally asked for daptomycin breakpoints for enterococci, particularly in relation to endocarditis. EUCAST has no daptomycin breakpoints for enterococci because in Europe daptomycin has marketing authorisation only for complicated skin and soft-tissue infections in adults and it was considered that there was insufficient evidence to set a breakpoint for this indication. With no EUCAST breakpoint for daptomycin with enterococci, the CLSI breakpoint of $S \leq 4$ mg/L tends to be used.

There are several recent publications relating to use of daptomycin for treatment of enterococcal endocarditis, all indicating the need for high dosage (≥ 8 mg/kg/day).

EUCAST is reluctant to report enterococci as susceptible to daptomycin as MICs for most of the wild type population are above breakpoints of $S \leq 1$, $R > 1$ mg/L indicated by PK/PD studies based on the standard dose of 4 mg/kg/day. The option would be to set breakpoints that categorise the wild type as intermediate, emphasising the need for high doses.

Table 1: Target attainment for 4mg/kg/day daptomycin

daptomycin MIC mg/L	% target attainment with an AUC/MIC target of		
	373 (- one standard deviation)	438 (mean)	503 (+ one standard deviation)
≥4	0	0	0
2	0	0	0
1	96.8	77.2	42.9
0.5	100.0	100.0	100.0
≤0.25	100.0	100.0	100.0

[Table of probabilities of target attainments (PTAs) from Prof A MacGowan]

[EUCAST] would value your expert view on whether EUCAST should publish daptomycin breakpoints for enterococci to support treatment of endocarditis and bacteraemia caused by *Enterococcus* spp.

References are available on request.

Upcoming conference :



Unifying Pathology & Laboratory Medicine in the Era of P4 Medicine

19—21 September 2014

CSIR International Convention Centre
Pretoria | South Africa

Microbiology will be a part of the annual pathology congress this year. The theme of this year's meeting is Unipath: Unifying Pathology and Laboratory Medicine in the era of P4 Medicine". P4 Medicine is being increasingly embraced within the ethos of medicine, especially diagnostic laboratory medicine. P4 Medicine is a term coined by biologist and founder of Applied Biosystems, Leroy Hood, and is short for "Predictive, Preventive, Personalized, and Participatory Medicine." The premise of P4 Medicine is that medical practice over the next 20 years will be revolutionized by biotechnology, to manage a person's health instead of managing a patient's disease.

An attractive and highly stimulating scientific programme is planned by the respective societies, with cross-disciplinary and cross-cutting presentations . The microbiology programme includes presentations on new diagnostic technologies, emerging invasive fungal diseases and, of course, CRE's and antibiotic stewardship with a smattering of interesting case reports. The separate immunology and virology programmes will bring us up to date with advances in these fields. It affords an excellent opportunity to network with colleagues from both microbiology as well as other allied laboratory disciplines.

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