



## **EXTREME INFECTIONS, HOW OPEN IS OPEN FOR INSTRUMENTS**

**We need to be reminded of the huge range of infection and access to healthcare in Australia – regions differ**

### **Melioidosis**

In my day the causative organism was called *Pseudomonas pseudomallei* but today is more accurately known as *Burkholderia pseudomallei*. It is not a common pathogen - even in the north of Northern Australia where it is endemic - but infection can be latent and lung infection can have a 50% fatality rate. Those most affected often have diabetes, renal disease etc. As well as respiratory infection, it can cause skin abscesses or ulcers. The bacteria are found in the soil and water in tropical areas and enter the body through cuts or inhalation etc. Melioidosis is recognised in the northern areas of the Northern Territory as the most common cause of fatal community-acquired bacteraemic pneumonia. Infection is much more common in the wet season. The antibiotic therapy must be followed for three months to prevent relapse which can be fatal. Diagnosis is by culture of the organism. Adult males present most commonly.

### **Rheumatic Heart Disease from untreated strep throats/impetigo**

We can hardly be proud to have the highest incidence of RHD in the world – in the NT largely. This is essentially a disease of poverty. Untreated strep throats /impetigo can result in rheumatic fever and damage to heart valves as well as kidney disease with obvious consequences. The GPs may only see the patient once and may take the opportunity to give an injection of bicillin rather than wait and see or take a swab. The Aboriginal Health workers visit the remote communities and town camps and do likewise. Mobile populations mean you react to the human being in front of you who is extremely unwell and may not return.

### **Lyssa virus**

In Northern Queensland the Bat Lyssa virus may be injected through bat bite saliva - fruit pickers and wildlife handlers are especially at risk. Rabies vaccine with rabies immune globulin is administered concurrently within a given period after the bite. The sheer numbers of bats and their close interaction with humans brings home how this virus can easily be spread – this infection has a near 100% mortality rate.

## **The last word on open instruments or just the start of a mini debate?**

The standards refer to open and unlocked instruments for packaging. This issue seems to cause concern but if you look at the aim of the standard, things become clearer. Ratcheted instruments are left unratcheted and scissors etc are left loose or if a bit stiff may be opened a couple of millimetres - they do not need to be spreadeagled in the pack (check images for CSSD and no scissors are wide open). The rationale behind this is that if an item is locked then the expansion of the heated metal may weaken/fracture the metal because it has nowhere to expand. As long as the item is loose, water molecules in the steam phase under pressure can access all surfaces. My other concern with wide open sharp scissors is that two sharp points may more easily damage your pack. Add to this that the point (no pun intended) of placing the instruments in the pack with the handle towards the opening end is to make retrieval safer for the user – this only occurs when the points are in the opposite direction to the handle. I hope this gives an insight into this issue.

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