ABSRACT

With the advent of antimicrobials, clinical management of bacterial infections changed and we were able to treat most of these infections successfully. But bacteria also fought back by developing antibiotic resistance, tarnishing the human effort. Since then, the battle between the two has been going on and it is very important to keep a vigilant eye on bacterial antibiotic susceptibility patterns in order to treat bacterial infections successfully. Even though abscesses are mainly treated surgically, antibiotics also play a key role. Therefore updated knowledge about the antibiotics sensitivity patterns of bacteria which cause abscesses is imperative.

Though Melioidosis has been reported sporadically in Sri Lanka,the true incidence, prevalence and geographical distribution are not known. Many melioidosis cases may have being missed due to lack of knowledge.

There were 2 objectives in carrying out this study.

1. To determine the microbiology of abscesses and the antibiotic sensitivity patterns of the causative organisms.
2. To determine whether *Burkholderia pseudomallei* is an important cause of abscesses.

The study was carried on 60 pus samples which were collected within 3 months. All isolates were identified up to species level and special attention was given to identify Gram negative bacilli which were oxidase positive. Suspected *Burkholderia pseudomallei* isolates were confirmed by molecular tests.

The causative organisms of abscesses varied according the site. As expected, *Stapylococcus aureus* was the predominant isolate from the subcutaneous abscesses & coliforms were

the predominant isolates from perianal abscesses. Antibiotic sensitivity patterns of Gram negative organisms were very variable and very unpredictable. Community acquired MRSA& ESBL were not isolated indicating that they are still not common. Isolation was not made in a significant number of samples due to lack of anaerobic facilities and prior antibiotic use.

Even with a grossly inadequate sample size, two presumptive *Burkholderia pseudomallei* were isolated from a neck and testicular abscesses. Though both isolates showed some physical & biochemical characters of *B. pseudomallei*, final identification could not be reached by conventional methods. Isolate from the neck abscess was confirmed as *B. pseudomallei* by PCR.Though the other isolate gave negative PCR result, additional studies are needed to come to a final conclusion.

Regarding melioidosis in Sri Lanka, only the tip of the ice berg is seen.
True incidence and prevalence will be revealed only after a comprehensive study which needs more samples and good molecular biology facilities.