

# Microorganisms Of Hand Infections In Hospital Keningau

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## INTRODUCTION:

Hand infection is common in Orthopaedic setting. This study aim to determine common organisms cultured in hand infection patients and their antibiotics sensitivity in Hospital Keningau

## METHODS:

A retrospective review was carried out over 2 years duration from January 2017 to December 2018 in Hospital Keningau.

## RESULTS:

Thirty one patients with hand infections were operated in Hospital Keningau in which 42 microorganisms isolated.

Table 1: Gram positive and negative microorganisms cultured in total of 42 cultures

Gram Positive	(n)	%
Staphylococcus aureus	17	40.48
Streptococcus Beta-hemolytic not group A	3	7.14
Streptococcus pyogene	1	2.38
Streptococcus lugdunensis	1	2.38
Enterococcus faecalis	1	2.38
Gram negative	(n)	%
Acinetobacter	6	14.29
Klebsiella sp	4	9.52
Escherechia coli	3	7.14
Pseudomonas sp	3	7.14
Serratia marcescens	1	2.38
Proteus sp	1	2.38
Enterobacter cloacae	1	2.38

Most gram positive organisms are susceptible to Trimetophrim/sulfamethoxazole (91.3%), Erythromicin (82.6%), gentamicin (78.3%), clindamycin (56.5%) and oxacillin (43.5%). Most gram negative organisms are susceptible to amikacin (78.9%), gentamicin

(68.4%), Trimetophrim/sulfamethoxazole (52.6%), ceftriaxone (47.4%) and cefuroxime (36.8%). Cloxacillin is the most used antibiotic which accounts for 21%.

## DISCUSSIONS:

Hand infections, if left untreated, can result in debilitating outcome. In this study, we reported 31 patients with hand infections treated with surgical drainage and antibiotics. Initial empirical antibiotic was administered, then adjusted accordingly based on antibiotic sensitivity. A study showed 44% isolated organism from hand infetions are Staphylococcus aureus which are most probably due to it is the commensal skin organism. Eventhough not all microorganisms are sensitive to oxacillin, it is still the most preferred antibiotic in Hospital Keningau, most likely due to availability of the antibiotic, less side effect and common organism isolated is gram positive organism.

## CONCLUSION:

Gram positive microorganism is the most common microorganism isolated in hand infection with oxacillin is the antibiotic of choice. This study could be improved if sample size is increased with collaboration with other hospitals in Sabah.

## REFERENCES:

1. Shirzad H et. Al. epidemiology of hand infection. International Journal of Infectious Diseases.2006;10:315-319