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Preventing meningitis and Brain inflammatory disease from the sustainability of Chronic Supurative Otitis Media causing high population mortality

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ABSTRAK

Communities who lack the understanding of personal hygiene and t he environment can suffer from Chronic Suppurative Otitis Media which, when continued, leads to inflammation of the brain and meningitis that eventually leads to death. This problem in Indonesia has a high prevalence of every 28,000 deaths, equal to 3.9%. To reduce this high mortality rate is to kill pathogenic bacteria that cause Chronic Suppurative Otitis Media can continue. Lactobacillus plantarum bacteria isolated from Virgin Coconut Oil, the result of its antimicrobial analysis performed with the method of modifying discs, can kill pathogenic bacteria isolated from the patient's secretions. So the death rate caused by this disease can be lowered.

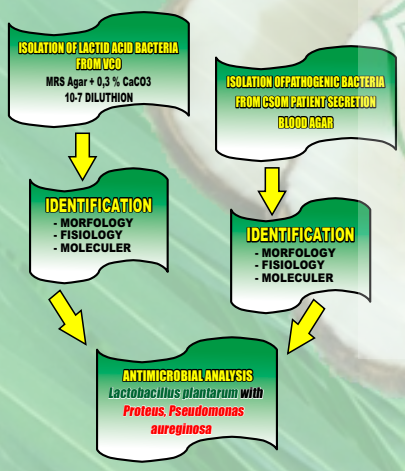
Keywords: Mortality, Chronic Supurative Otitis media, antimicrobial analysis, Lactobacillus palantarum, VCO

INTRODUCTION

Chronis Suppurative Otitis Media , a middle ear disease that can be suffered from children to adult men and women who, if not curable, will result in inflammation of the lining of the brain which can subsequently lead to death . Meanwhile reported that Otitis Media Suppurativ is a dangerous disease and can lead to complications that cause deaths in developing countries, including India, Nepal and Indonesia

VCO oil layer containing BAL (Lactic Acid Bacteria) , can inhibit the growth of pattogen bacteria , can also inhibit the growth of pattogen bacteria that exist in the ear fluids patients Otitis Media Suppurative Chronis. Pathogenic bacteria present in the fluid of Otitis Media Supurativ Chronis patients are Pseudomaonas Aureginosa, Proteus, and Staphylococcus (Suryani, Dharma et al., 2016).

METHOD



RESULT AND DISCUSSION

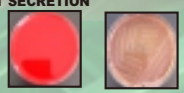
A. ISOLATION OF LACTID ACID BACTERIA

Isolates of lactic acid bacteria grown in the "HALO"

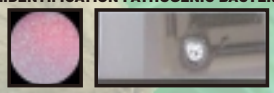
B. IDENTIFICATION LAB

>CONTIQ_MO_797bp_Lactobacillus plantarum_100%
AACACTTAGCATTCATCGTTTACGGTATGGACTACCAGGGTATCTAATCCTGTTTG
CTACCCATACTTTCGAGCCTCAGCGTCAGTTACAGACCAGACAGCCGCCTTCGC
CACTGGTGTTCTTCCATATATCTACGCATTTCACCGCTACACATGGAGTTCCACTG
TCCTCTTCTGCACTCAAGTTTCCCAGTTTCCGATGCACTTCTTCGGTTGAGCCGA
AGGCTTTCACATCAGACTTAAAAACCGCCTGCGCTCGCTTTACGCCCAATAAAT
CCGGACAACGCTTGCCACCTACGTATTACCGCGGCTGCTGGCACGTAGTTAGCC
GTGGCTTTCTGGTTAAATACCGTCAATACCTGAACAGTTACTCTCAGATATGTTCT
TCTTTAACAACAGAGTTTTACGAGCCGAAACCCTTCTTCACTCACGCGGCGTTG
CTCGATCAGACTTTCGTCCATTGTGGAAGATTCCCTACTGCTGCCTCCCGTAGGA
GTTTGGGCCGTGTCTCAGTCCCAATGTGGCCGATTACCCTCTCAGGTCGGCTAC
GTATCATTGCCATCGTCAGACGGCTTAGCCCACCATCTAGCTAATACGCCGCGGGAC
CATCCAAAAGTGATAGCCGAAGCCATCTTTCAAGCTCGGACCATGCGGTCCAAG
TTGTTATGCGGTATTAGCATCTGTTTCCAGGTGTTATCCCCCGCTTCTGGGCAGGT
TTCCCACGTGTTACTCACCAGTTCGCCACTCACTCAAATGTAAATCATGATGCAA
GCACCAATCAATACCAGAGTTCGTTCGA

C. ISOLATION OF PHATOGENIC BACTERIA FROM CSOM PATIENT SECRETION



D .IDENTIFICATION PATHOGENIC BACTERIA



E. ANTIMICROBIAL ANALYSIS

Isolat BAL	Diameter Daya Hambat (mm) Terhadap Bakteri Uji				
	P.aeruginosa	*S.aureus*	*S.epidermidis*	*Klebsiela sp*	*Proteus sp*
Isolat 1	12,05	9,8	10,85	11,7	11,15
	11,19	10,4	10,12	12,6	10,47
	12	21,02	11,01	11,17	11,82
Rata ± SD	11,74±0,48	13,74±6,31	10,66±0,47	11,82±0,28	11,14±0,95
Isolat 2	6	8,05	9,6	12,45	14,15
	10	10,9	11,45	9,7	11,05
	12,9	10,5	12,67	6	6
Rata ± SD	9,6±3,46	9,81±1,54	11,34±1,55	9,3±3,2	10,4±4,11
Isolat 3	17,05	9,52	10,85	12,85	10,05
	9,45	10,35	12,97	11,15	11,65
	11,25	15,62	9,5	10,1	10,37

CONCLUSION

1. LAB can kill phatogenic bacteria from CSOM
2. So as to reduce mortality

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