

# **PENGARUH PERAWATAN LUCA *MODERN DRESSING* KOMBINASI OZON DAN MADU DALAM MENURUNKAN ANGKA KUMAN ANAEROB ISOLAT *DIABETIC FOOT ULCER***

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## **ABSTRAK**

**Latar Belakang:** DFU merupakan luka kronis yang terinfeksi oleh bakteri. Tahap awal pembentukan luka kronis ditandai dengan munculnya bakteri aerob kemudian anaerob. Penelitian bertujuan untuk mengetahui pengaruh perawatan luka *modern dressing* kombinasi ozon bagging dan madu trigona dalam menurunkan angka kuman anaerob isolate DFU.

**Metode:** Penelitian ini menggunakan metode *quasi experimental pre test and post test control group* dengan pengambilan sampel secara accidental sampling. Responden penelitian ini adalah penderita rawat jalan di Klinik Kitamura. Subyek penelitian ini terdiri dari 38 responden dengan kelompok kontrol 19 responden dan intervensi 19 responden. Responden diberikan perlakuan *modern dressing* kombinasi ozon bagging dan madu trigona selama 4 kali perawatan, kemudian dilakukan pemeriksaan angka kuman anaerob dan pengukuran luka.

**Hasil:** Hasil penelitian angka kuman *anaerob* pada kelompok intervensi sebesar 301 CFU (pre test) dan 36 CFU (post test), pada kelompok kontrol sebesar 303 CFU (pretest) dan 102 CFU (post test), ( $p<0,05$ ). Skor luka pada kelompok intervensi 8,42 (pretest) dan 6,79 (posttest), sedangkan kelompok kontrol 8,79 (pretest) dan 7,95 (posttes) ( $p<0,05$ ).

**Kesimpulan:** Kesimpulan dari penelitian ini adalah perawatan luka menggunakan *modern dressing* kombinasi ozon *bagging* dan madu trigona mampu menurunkan angka kuman anaerob isolat serta mempercepat proses penyembuhan luka DFU. Ada perbedaan antara perawatan luka *modern dressing* kombinasi ozon *bagging* dengan madu trigona dalam menurunkan angka kuman anaerob isolat dan proses penyembuhan luka, serta tidak ada hubungan antara angka kuman anaerob isolat dengan proses penyembuhan luka DFU.

Kata kunci: *Modern dressing*, ozon, madu, bakteri anaerob

# **THE EFFECT OF MODERN DRESSING WITH OZONE COMBINATION AND HONEY IN REDUCING ON THE GROWTH OF ANAEROB BACTERIA ISOLATES DIABETIC FOOT ULCER**

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## **ABSTRACT**

**Background:** DFU is a chronic wound infected by the bacteria. The initial stage of chronic wound formation is characterized by the appearance of aerobic, and then anaerobic bacteria. The study was to determine the effect of modern dressing combination of ozone bagging and honeying in reducing the number of anaerobic isolates of DFU.

**Method:** This study uses a quasi-experimental method of pretest and post-test control group by accidental sampling. The respondents of this study were outpatients at the Kitamura Clinic. The subjects of this study consisted of 38 respondents with a control group of 19 respondents, and intervention of 19 respondents. Respondents were given a modern dressing combination of ozone bagging and honey for 4 treatments, then anaerobic germ examination, and wound measurement were performed.

**Result:** The results of the study anaerobic bacteria in the intervention group were 301 CFU (pretest) and 36 CFU (posttest), in the control group 303 CFU (pretest) and 102 CFU (posttest), ( $p < 0.05$ ). Wound scores in the intervention group 8.42 (pretest) and 6.79 (posttest), while the control groups 8.79 (pretest) and 7.95 (posttest) ( $p < 0.05$ ).

**Conclusion:** The conclusion of this study is wound care using a modern dressings combination of ozone bagging and trigona honey can reduce the number of anaerobic bacteria isolates and accelerate the process of wound healing DFU. There is a difference between modern wound care dressing combined with ozone bagging and trigona honey in reducing the number of anaerobic bacteria isolates and wound healing process, and there is no relationship between the number of anaerobic bacteria isolates with the wound healing process DFU.

Keyword: Modern dressing, ozone, honey, bacteria anaerob