Efek preventif ekstrak etanol kelopak bunga rosela 10%(hibiscus sabdariffa) terhadap model periodontitis mus musculus(Swiss webster) dengan aplikasi ligature silk thread = Preventive theraphy effect of rosela flower (hibiscus sabdariffa) calyxy ethanol extract on mus musculus (Swiss webster mice) induced periodontitis model with application of ligature silk thread

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Abstrak

ABSTRACT
Latar Belakang: Periodontitis merupakan penyakit yang disebabkan adanya akumulasi bakteri sehingga dapat menyebabkan kerusakan tulang. Selama ini tindakan preventif periodontitis banyak menggunakan terapi obat sintetis sehingga menimbulkan berbagai efek samping. Oleh sebab itu, pemanfaatan dan penggunaan ekstrak etanol Hibiscus sabdariffa diharapkan dapat memberikan alternatif bahan preventif periodontitis. Tujuan: Menganalisis efek preventif Hibiscus sabdariffa terhadap periodontitis Metode: Pembuatan model periodontitis pada Mus musculus dilakukan dengan mengikatkan ligature silk thread pada gigi molar kedua, selanjutnya perlakuan diberikan dengan irigasi dengan salin steril Otsu-NS 0.9% (kontrol) dan ekstrak etanol rosela 10% (preventif) agar terjadi penumpukan plak. Pada hari ke tujuh ligature dilepas diambil sampel selanjutnya dianalisis dengan Image-J. Hasil: Tidak terjadi perbedaan bermakna antara kelompok perlakuan kontrol dengan ekstrak etanol rosela 10%. Kesimpulan: Ekstrak etanol kelopak bunga rosela10% tidak menunjukkan adanya efek preventif terhadap kerusakan tulang pada model periodontitis dengan Ligatur Silk Thread.
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ABSTRACT
Peridontitis is a disease that is caused by accumulation of bacteria that cause bone destruction. Studies have shown that antibiotic thus one of the most common preventive theraphy for periodontitis however there are side effects in prolonged use, recent studies shown that Hibiscus sabdariffa a well known traditional herbal medicine has a significant effect in retaining anti bacterial behavior of cells. Therefore, by utilizing and using ethanol extract of Hibiscus destruction hope to be an alternative way for an effective preventif theraphy. Objective: To analyze preventive property of Hibiscus sabdariffa for periodontitis in maxillary posterior region of Swiss Webster Mouse. Methods: Periodontitis model was induced by ligature silk thread circumferentially on the maxillary second molar gingiva of Swiss Webster mouse using ligature silk thread. Spooling with sterlized saline solution Otsu-NS 0.9% for control and ehthanol extract rosela 10% for preventive theraphy, respectively. After the seventh day sampel was taken and analyze by image-J. Results: Overall bone loss occurred after the injection of Ethanol extract in Hibiscus sabdariffa 10% is 166,5µm 2 compare with control that is 142µm2 on the site of the Ligature wire. Conclusion: Active anti-inflammation properties of ethanol extract in Hibiscus sabdariffa 10% has not shown some preventive effect for periodontitis preventive theraphy.