ABSTRAK

EFEKTIVITAS *ECO-ENZYME* USIA PANEN ENAM BULAN TERHADAP KESEMBUHAN LUKA INSISI KULIT PASCA KASTRASI PADA KUCING

Afifah Hanun
18/427280/KH/09654

Luka pasca operasi kastrasi harus ditangani dengan sebaik mungkin agar tidak terjadi infeksi. Melalui beberapa penelitian ditemukan e*co-enzyme* yang merupakan hasil fermentasi sisa-sisa buah dan sayur yang memiliki aktivitas antimikroba dan antiinflamasi. Sehingga penelitian ini bertujuan menguji efektivitas *eco-enzyme* dalam upaya penyembuhan luka insisi pasca kastrasi.

Kucing berjumlah 20 ekor dengan rata-rata berat badan 3,5 kg dibagi menjadi 4 kelompok perlakuan, yaitu kelompok I (Betadine®) sebagai kelompok kontrol, kelompok II (*eco-enzyme* 100%), kelompok III (*eco-enzyme* 50%), dan kelompok IV (*eco-enzyme* 25%). Prosedur kastrasi dilakukan pada semua kucing, setelah itu kucing dibawa pulang oleh pemilik/*rescuer* dan masing-masing diberi *eco-enzyme* 100%, *eco-enzyme* 50%, *eco-enzyme* 25%, dan Betadine® sesuai data yang diatur, serta diminta melakukan pengobatan secara rutin dan dokumentasi foto luka. Pengamatan dan penilaian luka dilakukan pada hari pertama pasca operasi (H1), hari ketiga (H3), hari kelima (H5), dan hari ketujuh (H7) melalui foto yang dikirimkan oleh pemilik. Pada hari kesembilan (H9) pasca operasi dilakukan pengambilan darah untuk dilakukan uji hematologi lengkap. Selanjutnya data penilaian luka dan hematologi dianalisis menggunakan uji *One-Way* Anova dan Kruskal Wallis.

Hasil analisis menggunakan uji *One-Way* Anova menunjukkan tidak ada perbedaan yang signifikan (P>0,05) antar kelompok perlakuan terhadap parameter vaskularisasi dan pigmentasi. Namun penurunan nilai vaskularisasi untuk semua kelompok perlakuan dari hari pertama (H1) hingga hari ketujuh (H7) mengindikasikan proses kesembuhan luka yang baik. Hasil analisis data hematologi menunjukkan tidak ada perbedaaan yang signifikan antara ketiga kelompok perlakuan dan kontrol terhadap hampir semua profil hematologi kucing, kecuali hemoglobin, hematokrit, dan MCHC.

Kata kunci: kucing, kastrasi, kesembuhan luka, *eco-enzyme*.

ABSTRACT

EFFECTIVITY OF SIX-MONTH OLD ECO-ENZYME ON CAT'S SKIN INCISION HEALING DURING POST CASTRATION PERIOD

Afifah Hanun
18/427280/KH/09654

Post-castration surgery wounds must be treated as well as possible to avoid infection. Through several studies, eco-enzyme has been found which is the result of fermentation of the remains of fruits and vegetables that have antimicrobial and anti-inflammatory activities. The purpose of this study was to test the effectiveness of eco-enzyme on post-castration incision wound healing.

Twenty cats with an average body weight of 3,5 kg were divided into 4 groups: group I (Betadine®), group II (eco-enzyme 100%), group III (eco-enzyme 50%), and group IV (eco-enzyme 25%). The castration procedure was carried out on all cats, after that the cats were brought home by the owner/rescuer and each was given *eco-enzyme* 100%, *eco-enzyme* 50%, *eco-enzyme* 25%, and Betadine® according to the data that has been arranged and asked to do routine treatment and photo documentation of wounds. Observations and wound assessment were carried out on the first postoperative day (H1), third day (H3), fifth day (H5), and seventh day (H7) through photos sent by the owner. On the ninth day (H9) postoperative, blood was taken for complete hematological testing. Wound assessment and hematology data was analyzed using the One-Way Anova and Kruskal Wallis tests.

The results of the analysis using the One-Way Anova test showed that there was no significant difference (P>0,05) among the eco-enzyme concentration groups of 100%, 50%, and 25% and Betadine® as a control group on vascularization and pigmentation parameters. However, the decrease in vascularity values for all treatment groups from the first day (H1) to the seventh day (H7) indicated a good wound healing process. Hematological data showed that there was no significant difference among the three treatments and control groups on almost all cat's hematological profiles, except for the hemoglobin, hematocrit and MCHC.

Keywords: cat, castration, wound healing, eco-enzyme.