PLAGIAT MERUPAKAN TINDAKAN TIDAK TERPUJI

INTISARI

Beberapa penelitian menemukan bahwa stres dapat menyebabkan peningkatan kadar glukosa darah. Stres disebabkan oleh paparan stresor. Penelitian ini akan melihat bagaimana pengaruh stresor dengan menggunakan metode bising dan Aktivitas Fisik Maksimal (AFM) terhadap kadar glukosa darah.

Penelitian ini merupakan penelitian eksperimental murni dengan rancangan *pretest* dan *post test group design*. Penelitian menggunakan 20 ekor tikus putih jantan galur Wistar, umur 2-3 bulan, berat badan ± 200-300 gram yang secara acak dibagi menjadi kelompok kontrol dan perlakuan. Metode bising menggunakan bising berintensitas 85-100 dB selama 2 jam/hari selama 3 hari. Metode AFM berupa perlakuan berenang selama 30 menit/hari selama 3 hari. Pengukuran kadar glukosa darah dilakukan 30 menit sebelum pemaparan stresor dan segera setelah perlakuan berakhir. Pengukuran menggunakan instrumen Architect *c system* dengan metode glukosa heksokinase. Normalitas distribusi data ditentukan menggunakan uji *Shapiro Wilk*. Signifikansi perubahan kadar glukosa darah sebelum dan sesudah perlakuan ditentukan menggunakan uji *pair t test* atau *Wilcoxon*. Perbedaan pengaruh metode bising dan AFM terhadap kadar glukosa darah ditentukan dengan uji *independent t test* atau *Mann Whitney*. Taraf kepercayaan yang digunakan 95%.

Hasil penelitian menunjukkan bahwa stresor dengan metode AFM mempengaruhi kadar glukosa darah tikus putih jantan sedangkan stresor dengan metode bising tidak. Stresor dengan metode AFM memberikan pengaruh yang lebih besar terhadap kadar glukosa darah tikus putih jantan jika dibandingkan dengan stresor yang menggunakan metode bising.

Kata kunci : stresor, metode bising, metode AFM, kadar glukosa darah

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ABSTRACT

Some of the previous researches had discovered that stress can lead to the elevated level of blood glucose. Stress is caused by the exposure of stressor. This research is going to find out the effect stress on blood glucose level used noise method and maximun physical activity method.

This research is pure experimental with pretest and post test group design. This research used 20 *wistar* white male rats, age 2-3 month, weight ± 200-300 gram that were randomly divided into 2 group, control and treatment with stressor. The Noise method consist of noise with 85-100 dB intensity about 2 hours/day for 3 days. On maximum physical activity method the rats was allowed to swim for 30 minutes/day for 3 days. The measurement of blood glucose level used Architect c system with glucose hexokinase method. All data obtained were analyzed statistically by using Shapiro Wilk test to know the normality of distribution. Pair t test or Wilcoxon was used to see the significance change in level before and after the treatment. To determine the difference between noise method and maximum physical activity method effect on blood glucose level used Independent t test or Mann Whitney. The interval that was used is about 95%.

The result showed that the maximum physical activity was affect the blood glucose level of white male rats, while noise method was not. Stressor using maximum physical activity method had a greater effect to increase blood glucose level than the noise method.

Key words*: stress, maximum physical activity method,noise method, blood glucose level.*