

PENGARUH STERILISASI DENGAN OVEN PADA SUHU 130°C TERHADAP POTENSI NEOMISIN SULFAT DALAM SALEP MATA

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ABSTRAK

Salep mata Neomisin sulfat yang telah dibuat disterilkan dengan oven pada suhu 130°C selama 60 menit, lalu dilakukan uji sterilitas dan uji potensi terhadap masing-masing sediaan. Sebelum diuji sediaan salep mata dilarutkan terlebih dahulu dengan pelarut salep (isopropil miristat). Uji sterilitas dilakukan menggunakan metode filtrasi membran dengan media Tioglikolat dan Kasamino. Media Tioglikolat yang telah ditanami setengah bagian membran yang telah digunakan untuk menyaring sampel diinkubasi pada suhu 35°C selama 7 hari, sedangkan media Kasamino yang telah ditanami setengah bagian membran yang telah digunakan untuk menyaring sampel diinkubasi pada suhu kamar yaitu 25°C selama 7 hari. Dari hasil uji sterilitas diperoleh bahwa kedua sediaan tersebut steril. Untuk uji potensinya digunakan bakteri *Staphylococcus epidermidis* yang ditanam pada Antibiotik Medium I dengan metode difusi agar (*cylinder cup*) yang dilakukan pada sediaan yang tidak disterilkan dan yang disterilkan dengan oven pada suhu 130°C selama 60 menit. Hasil uji potensinya menunjukkan bahwa tidak terdapat perbedaan yang signifikan antara diameter daya hambat pada sediaan salep mata yang disterilkan dengan oven pada suhu 130°C selama 60 menit dan yang tidak disterilkan.

Kata Kunci : Salep mata, Neomisin sulfat, sterilitas, potensi, *Staphylococcus epidermidis*.

THE EFFECT OF STERILIZATION AT 130°C WITH OVEN ON THE POTENCY OF NEOMYCIN SULPHATE IN EYE OINTMENTS

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ABSTRACT

Neomycin sulphate eye ointment that had been made was sterilized in oven at 130°C for 60 minutes, then sterility and potency test was carried out. Before the test, the eye ointment was dissolved first with isopropyl myristate. Sterility test was carried out using a membrane filtration method with Thioglycolate and Soybean-Casein Digest Medium. Thioglycolate Medium which had been inoculated with half of the membrane that had been used to filter the samples was incubated at 35°C for 7 days and Soybean-Casein Digest Medium which had been inoculated with half of the membrane that had been used to filter the samples was incubated at room temperature that was 25°C for 7 days. The results of sterility tests showed that both preparations were sterile. To test the potency, *Staphylococcus epidermidis* grown in Antibiotic Medium I with agar diffusion method (*cylinder cup*) was used. The test was made on preparation that was not sterilized and on preparation that was sterilized with oven at 130°C for 60 minutes. Potency test results showed that there was no significant difference between the diameter of the inhibition on the eye ointment was sterilized and that was not sterilized.

Keywords: Eye ointments, Neomycin sulphate, Sterility, Potency, *Staphylococcus epidermidis*.