

11th International Conference on
Mental Health and Human Resilience
37th European Ophthalmology Congress

July 31-August 01, 2023

Vancouver, Canada

J Clin Exp Ophthalmol 2023, Volume 14

The safety and efficacy of black tea extract in the treatment of acute bacterial conjunctivitis: A rabbit model

Abdullatif AM, Hassan LM, Shash RY and Marrie Ayah*
Cairo University, Egypt

Purpose: To determine the safety and efficacy of black tea extract in the treatment of bacterial conjunctivitis in a rabbit model and compare it with that of gatifloxacin drops.

Methods: Black tea extract was tested in vitro on bacterial cultures of methicillin-resistant *Staphylococcus aureus* (MRSA) and *Pseudomonas aeruginosa*. Forty-two rabbit eyes were cultured with either MRSA (n.21) or *P. aeruginosa* (n.21) and further divided into a control group (n.5), a tea group (n.8) treated with black tea extract and a gatifloxacin group (n.8) treated with 0.3% gatifloxacin eye drops. Conjunctival swabs were collected on the third and fifth days.

Results: The tea extract successfully inhibited the growth of both organisms at a concentration of 400 mg/mL. Rabbits in the treatment groups showed a reduction in the clinical index on day 2 (P, 0.01), unlike the control group (P.0.1), for both organisms. Resolution of conjunctivitis was achieved on days 4 and 5 in the tea and gatifloxacin groups, respectively. On days 3 and 5, while the control group still showed considerable bacterial growth, the tea and gatifloxacin groups showed its inhibition.

Conclusions: Tea extract has antimicrobial effects similar to those of gatifloxacin in a rabbit model of conjunctivitis.