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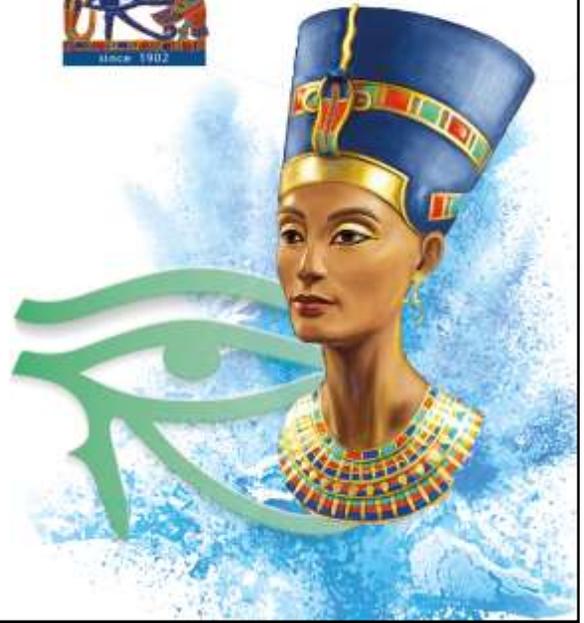
EGYPTIAN OPHTHALMOLOGICAL SOCIETY

EOS 2023



***Safety and Efficacy of Black Tea Extract in the Treatment
of Acute
Bacterial Conjunctivitis: A Rabbit Model***

Ayah Marrie, MD



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the Treatment of Acute
Bacterial Conjunctivitis: A Rabbit Model***

Ayah Marrie, M.D.



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> Eye Contact Lens. 2023 Jan 1;49(1):35-41, doi: 10.1097/ICL.0000000000000954.
Epub 2022 Nov 10.

Safety and Efficacy of Black Tea Extract in the Treatment of Acute Bacterial Conjunctivitis: A Rabbit Model

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Affiliations + expand

PMID: 36544283 DOI: 10.1097/ICL.0000000000000954



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Purpose of the study :

I always had a question about safety and efficacy of **tea compresses**

As it is **very popular in our tradition**

اعمل كمادات شاي يا دكتوره؟



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Review of literature:

Volume 20, Issue 3 (12-2012)

Avicenna J Nurs Midwifery Care 2012, 20(3): 5-15 | Back to browse Issues page

Comparing the Effects of Brewed Conjunctivitis

M. Attarha, Ph.D. student, K. Vakilian, Ph.D

Comparison of the ant microbial activity of bla

June 2010 · Food Research Intern

DOI:10.1016/j.foodres.2010.04.020

Authors:

All Invitro No clinical data

1030484.

on measured total polyphenol contents and antioxidant and antibacterial activities of black tea

Nihal Turkmen [†], Y Sedat Velioglu, Ferda Sari, Gokce Polat

Affiliations + expand

PMID: 17851405 PMCID: PMC6149426 DOI: 10.3390/12030484

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Methods:

- In vitro:

Tea extract is as effective as
Gatifloxacin 0.3% in inhibition of
MRSA and pseudomonas

At Concentration of 400mg/mL



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Methods:

- In vivo :

Induction of conjunctivitis with 2 bacterial species

MRSA and PSEUDOMONAS



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Methods:



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Methods:



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Methods:

Eyes were divided into 3 groups:

- Group A 16 eyes : Tea drops
- Group B 16 eyes: Gatifloxacin 3%
- Control Group 10 eyes : Saline



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Our aim was to document:

1- **Efficacy** of Tea eye drops as an antibiotic, and compare the results to a know widely use topical antibiotic



2- **Safety** of the tea on the ocular surface (cornea, conjunctiva and eyelid)



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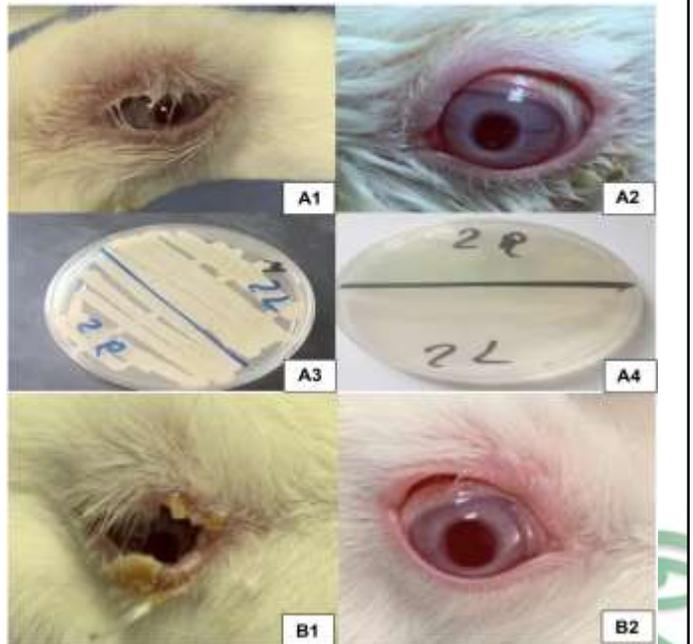
Methods:

Efficacy 2 methods to document :

Clinical picture

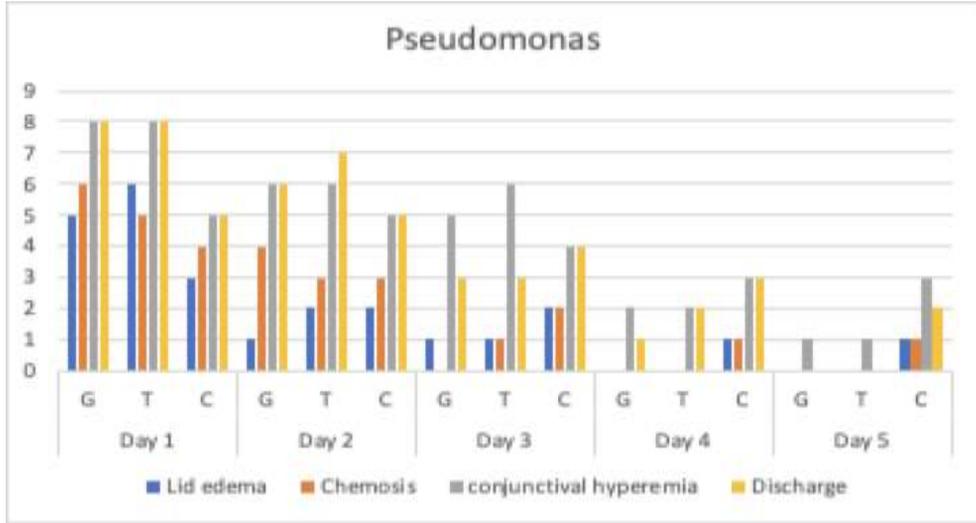
Chemosis, purulent discharge, diffuse conjunctival hyperemia, and eyelid edema

Bacterial Growth Inhibition (swabs)



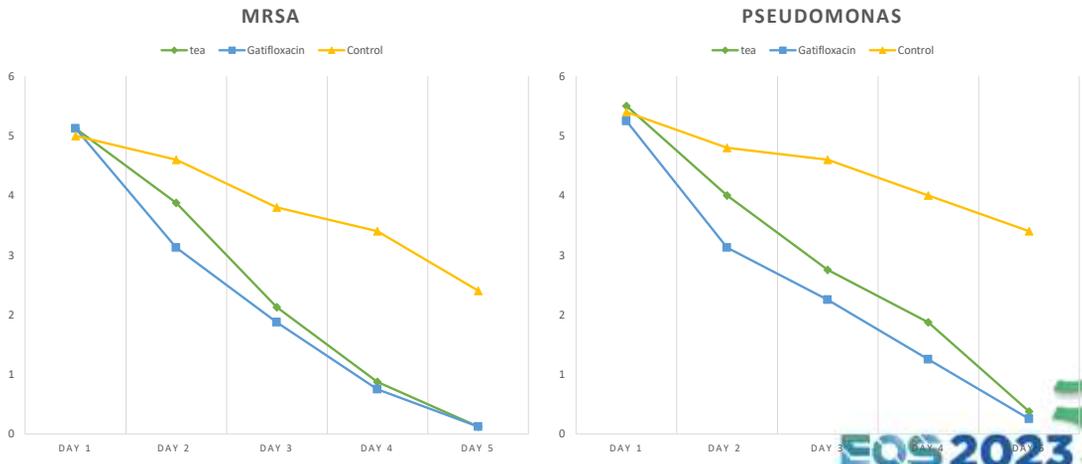
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Results regarding clinical picture:



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Results using clinical index



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Results regarding **Bacterial Growth Inhibition (swabs)**

	DAY 1			DAY 2			DAY 3			DAY 4			DAY 5		
	G (n=8)	T (n=8)	C (n=5)												
Lid edema	5	6	3	1	2	3	1	1	2	0	0	1	0	0	1
Chemosis	6	5	4	4	3	3	0	1	2	0	0	1	0	0	1
Conjunctival Hyperemia	8	8	5	8	8	5	8	8	5	7	8	5	2	3	5
Discharge	8	8	5	6	7	5	3	4	4	0	1	3	0	0	3
Positive Culture	8	8	5				0	0	5				0	0	3

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Results:

As regarding **safety**:

- We didn't notice any irritation to the ocular surface
- Only side effect we noticed in the pigmentation of the periorcular fur



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Conclusion:

- Tea is an **effective** and **safe** antibiotic for conjunctivitis.
- **Effective:** NOW I routinely advise my patients to do tea compresses in any case of blepharoconjunctivitis.
- **Safe:** Its ok for the tea to get into your eyes
- Clinically: Better results than antibiotics alone



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Thank you



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