

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

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> Eye Contact Lens. 2023 Jan 1;49(1):35-41. doi: 10.1097/ICL.000000000000954. 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

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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؟



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 Brev Conjunectivitis

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

Comparison of the microbial activity of

June 2010 · Food Research II
DOI:10.1016/j.foodres.2010.0

Authors:

All Invitro No clinical data

easured total

Nihal Turkmen ¹, Y Sedat Velioglu, Ferda Sari, Gokce Polat

Affiliations + expand

PMID: 17851405 PMCID: PMC6149426 DOI: 10.3390/12030484

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• In vitro:

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

At Concentration of 400mg/mL



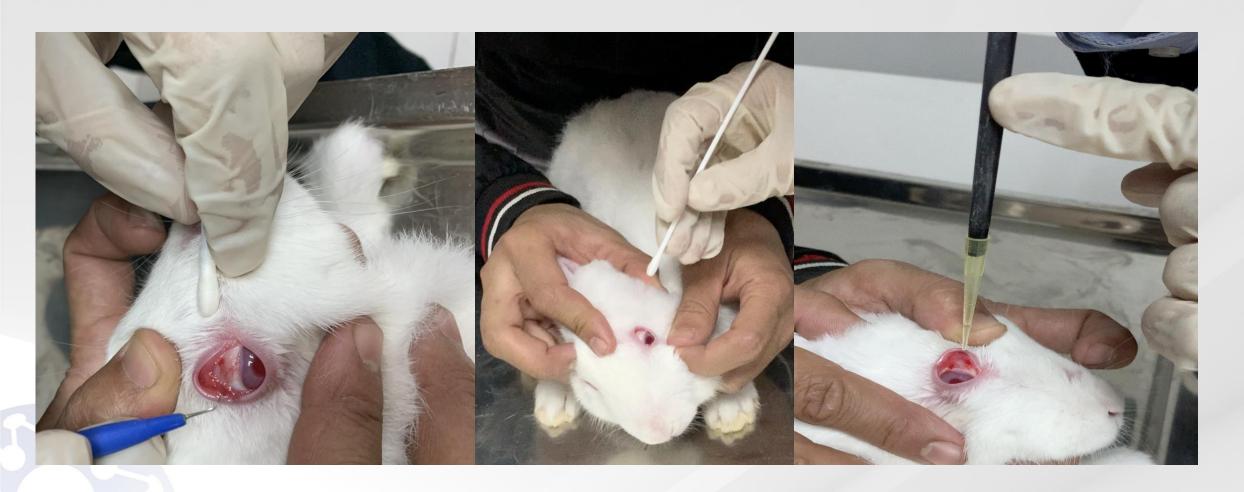
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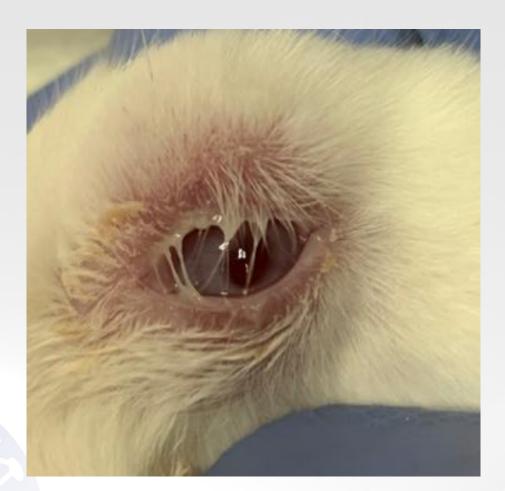
• In vivo:

Induction of conjunctivitis with 2 bacterial species

MRSA and PSEUDOMONAS









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Eyes were divided into 3 groups:

Group A 16 eyes : Tea drops

• Group B 16 eyes: Gatifloxacin 3%

Control Group 10 eyes : Saline



Our aim was to document:

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



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

Efficacy 2 methods to document:

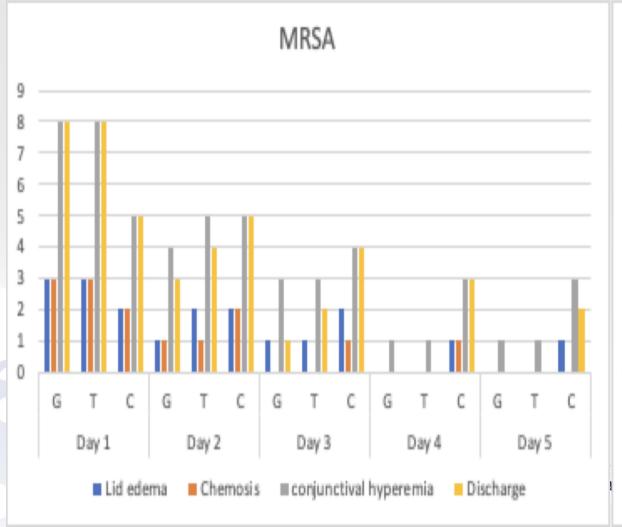
Clinical picture

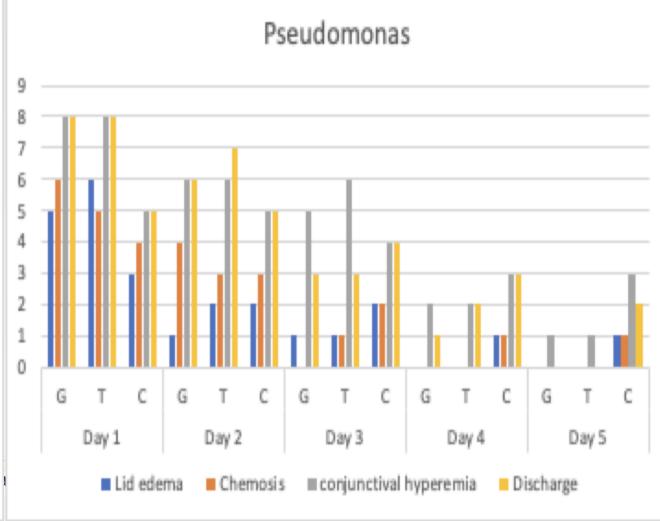
Chemosis, purulent discharge, diffuse conjunctival hyperemia, and eyelid edema

Bacterial Growth Inhibition (swabs)

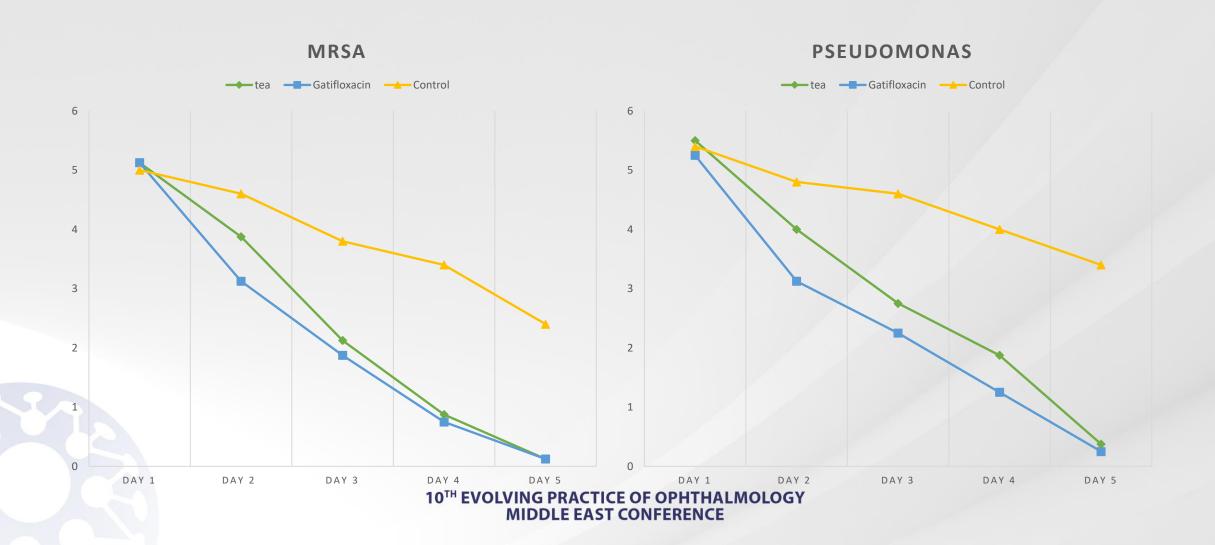


Results regarding clinical picture:





Results using clinical index



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)	G (n=8)	T (n=8)	C (n=5)	(n		T n=8)	C (n=5)		G (n=8)	T (n=8)	C (n=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	









Results:

As regarding safety:



We didn't notice any irritation to the ocular surface

Only side effect we noticed in the pigmentation of the periocular fur

Conclusion:

• Tea is an effective and safe antibiotic for conjunctivitis.

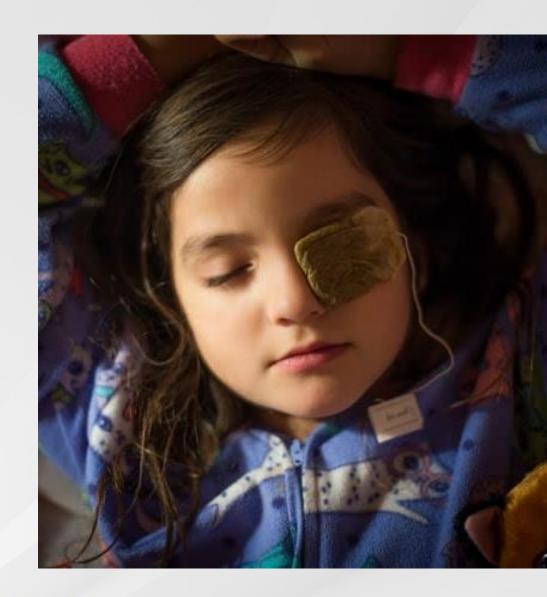


 Effective: NOW I routinely advice my patients to do tea compresses in any case of blepharoconjunctivitis.

• Safe: Its ok for the tea to get into your eyes

Clinically: Better results than antibiotics alone

Thank you



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