

# Investigating the **effect of local administration of DBD plasma** in the **treatment of chronic vaginitis**



2025

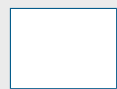


Affiliations to disclose:

obstetric and gynecologist surgeon



Funding for speaker to attend:



Self-funded



Institution (non-industry) funded

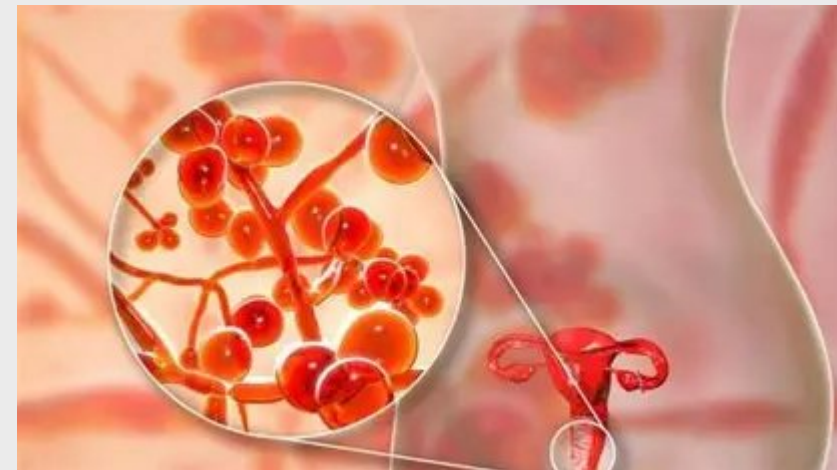


Sponsored by: **soren medical center**



## Analytical-cross-sectional study

- ❑ **50women** suffering from chronic vaginitis
- ❑ who visited women's clinics affiliated with **Shahid Beheshti University of Medical Sciences in Tehran** in the year 2024
- ❑ **Diagnosis and confirmation** of chronic vaginitis is performed by a **gynecologist**.



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**ages 18 to 35 and written informed consent to participate in the study.**

**The inclusion criteria**



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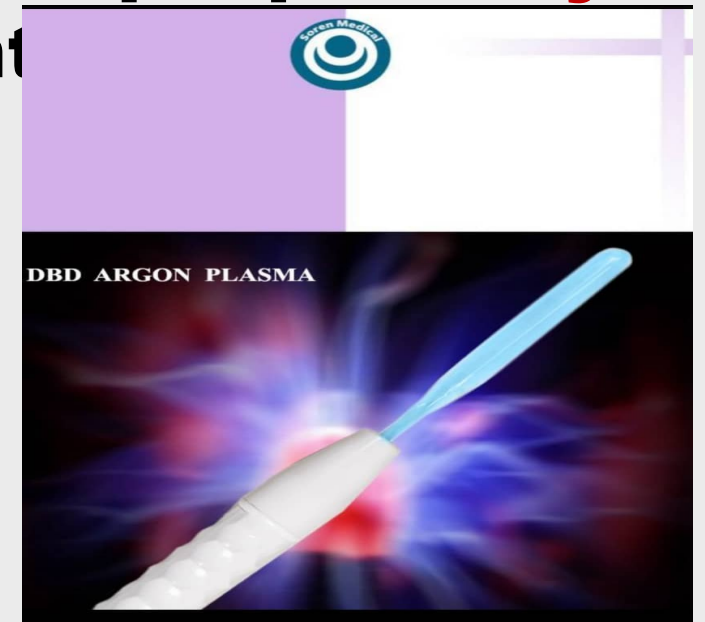
## **exclusion criteria**

- ☐ **Malignancies of the cervix**
- ☐ **immune system deficiencies**
- ☐ **infections with AIDS and hepatitis**
- ☐ **metabolic and chronic diseases (diabetes, hypertension, liver and kidney failure)**
- ☐ **pregnancy**
- ☐ **multi-partner relationships, and individuals with abnormal Pap smears**



**Patients were divided into two groups using randomization through the method of block randomization:**

- ❑ **A: Intervention group: 25 people: standard treatment + treatment with DBD plasma FOR SOREN medical center [4 week ,weekly,15 min]**
- ❑ **B: Control group: 25 people: only standard treatment**



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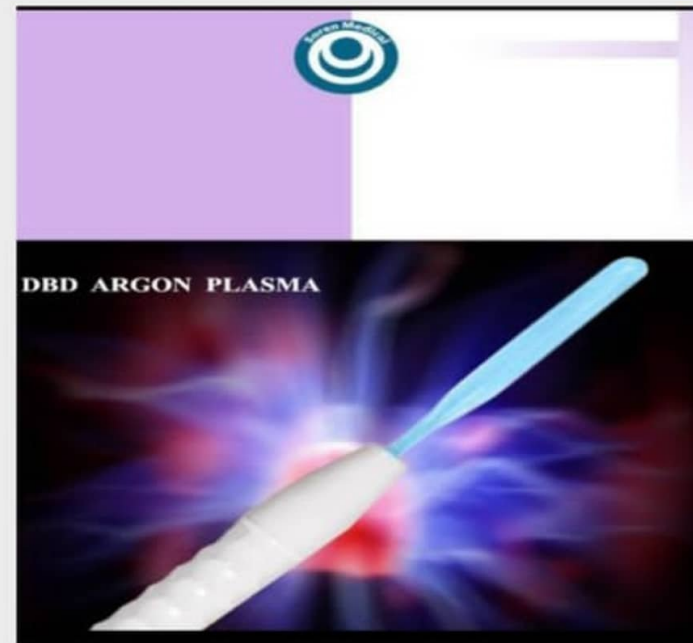
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- ❑ **The primary outcome included the severity of the patients' clinical symptoms**
- ❑ **the secondary outcome included the level of satisfaction with the intervention and any potential complications."**



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**Table 1 – Distribution of demographic and background information of women with vaginal infections**

	P-value	total				Demographic in formation	
		Control		Case			
		PERCENTAGE	N	PERCENTAGE	N		
	0/564	44/0	11	36/0	9	(29 – 18)	Age
		56/0	14	64/0	16	(59 – 30)	
	0/456	60/0	15	72/0	18	Housewife	Job
		24/0	6	24/0	6	employee	
		8/0	2	–	–	unknown	
		8/0	2	4/0	1	others	
	0/767	16/0	4	24/0	6	"non-healing wound"	Chief complain
		68/0	17	60/0	15	Recurrent infection	
		16/0	4	16/0	4	Non response to drug	



**Table 2 – Distribution of vaginal infection severity**

P-value	total				Severity of infection	
	control		case			
	p	n	p	n		
0/774	-	-	-	-	little	Before study
	56/0	14	60/0	15	intermediate	
	44/0	11	40/0	10	much	
< 0/001	8/0	2	68/0	17	little	After study
	80/0	20	32/0	8	intermediate	
	12/0	3	-	-	much	

**table 3 –  
Distribution of  
patient  
satisfaction with  
treatment among  
women  
diagnosed with  
vaginal  
infections.**

P	N	level of satisfaction with treatment"
56/0	14	completely satisfied
40/0	10	Somewhat Satisfied
4/0	1	Average satisfaction
100	25	total



# Discussion



<https://doi.org/10.3390/w15234045>



Article

## Physicochemical Characteristics and Antimicrobial Efficacy of Plasma-Activated Water Produced by an Air-Operated Coaxial Dielectric Barrier Discharge Plasma

F. S. Miranda <sup>1,2,\*</sup> , V. K. F. Tavares <sup>1</sup>, M. P. Gomes <sup>2</sup>, N. F. Azevedo Neto <sup>1</sup> , W. Chiappim <sup>3,\*</sup> , G. Petraconi <sup>2</sup>, R. S. Pessoa <sup>2</sup> and C. Y. Koga-Ito <sup>1,4</sup>

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## Discussion



### Effect of dielectric barrier discharge plasma jet on bactericidal and human dermal fibroblasts adult cells: In vitro contaminated wound healing model



*cancers*



► *Cancers* (Basel). 2023 Apr 20;15(8):2386. doi: [10.3390/cancers15082386](https://doi.org/10.3390/cancers15082386)

### Plasma Device Functions and Tissue Effects in the Female Pelvis—A Systematic Review

## Conclusion

**DBD plasma reduces clinical symptom severity in chronic vaginitis while demonstrating high satisfaction rates and minimal complications.**



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