



Use of phototherapy in the treatment of anal fissure: preliminary data [Abstract 564]



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HYPOTHESIS

Genitourinary Syndrome of Menopause (GSM) is characterized by a set of signs and symptoms correlated with estrogen deficiency. It associated with side effects of oncological treatment, decrease quality of life and sexual function. The Light Emitting Diode (LED) is a non-invasive phototherapy, capable restoring the quality of vaginal tissue.

The aim of this study is to evaluate the impact of blue light in reducing vaginal atrophy, evolution of symptoms, quality of life and safety in breast cancer survivors with GSM.

METHODS

Individuals with anal fissure awaiting surgical intervention, aged 18 or older were included. Those who had some pelvic inflammation, undergone a surgical procedure and had recurrence were excluded.

Patients answered the following questionnaires: Rome IV Criteria, Bristol Scale and Visual Analogue Scale (VAS). After that they underwent a physical evaluation made by the investigator and only then began the application of the research protocol.

The protocol consisted in 3 sessions of Laser Antares (IBRAMED, São Paulo, Brazil), using red light, 3J and covering six points, while staying per 30 seconds in each location, with an interval of 24 hours between sessions.

The visual analogue scale (VAS) was used to assess the patient's level of pain, which can be divided into mild pain (1-2), moderate pain (3-7), and severe pain (8-10). The Bristol Scale is based on the identification of the patient's consistency of stools, while types 1-2 correspond to constipation, 3-4 indicate normal intestinal rhythm, 5 indicate lack of fiber, and 6-7 correspond to diarrhea.

In addition, at the end of treatment, the closure, or not, of the lesion was verified, and the questionnaires were reapplied.

RESULTS

The study consisted of a sample of 10 patients, between 29 and 59 years old (Table 1).

Table 1: Epidemiological and Clinic characteristics (N= 10)

CHARACTERISTICS	n(%)
Age in years, ± SD	35 (± 14)
Gender	
Female	9 (90%)
Male	1 (10%)
Self-Reported Color	
Black	5 (50%)
Brown	4 (40%)
White	1 (10%)
Marital Status	
Not married	6 (60%)
Married	3 (30%)
Divorced	1 (10%)
Religion	
None	1 (10%)
Catholic	4 (40%)
Candomblé	1 (10%)
Christian	2 (20%)
Spiritist	2 (20%)
Income	
None	2 (20%)
1 salary	4 (40%)
2 salaries	1 (10%)
3 salaries	1 (10%)
4 salaries	1 (10%)
10 salaries	1 (10%)
Comobidities	
None	5 (50%)
Systemic Arterial Hypertension	4 (40%)
Diabetes Mellitus	1 (10%)
Psychiatric Illnesses	
None	8 (80%)
Panic Syndrome	1 (10%)
Depressive Mood Disorder	1 (10%)

RESULTS

Before undergoing treatment, 70% of the patients had severe pain and after the first phototherapy session, it changed to 40%.

After the second session, 90% of the patients reported moderate pain through the VAS, and in the final 40% reported moderate pain and 10% no longer had any pain. In the pre-treatment stage, according to the Bristol scale, 70% showed signs of severe constipation and all participants needed to strain during the evacuation act, presented bleeding, and also tenesmus.

After the treatment, only 10% had dry-looking stools and the other 90% started to present Bristol between 3 and 4. In addition, 30% still needed to strain to evacuate or had tenesmus and only 1 had bleeding (Table 2).

None of the participants needed to perform a manual maneuver for evacuation (Table 2).

All patients achieved progress, and none had severe pain anymore. Comparing the pre- and post-treatment stages, typical symptoms of constipation were eradicated in most cases. It can be explained because the light increases local circulation and aids healing, while these properties improve anal fissure and, consequently, the associated symptoms (Table 2).

	PATIENT →	1	2	3	4	5	6	7	8	9	10
PRE-TREATMENT	Bristol	1-2	1	3	3	1-3	2	1	1-2	1-5	1-2
	Need to force	x	x	x	x	x	x	x	x	x	x
	Tenesmus	x	x	x	x	x	x	x	x	x	x
	Feeling of obstruction	x			x						
	Manual maneuver		x			x					
	Weekly evacuation frequency	2	2	3	7	2	3	2	2	1	2
	Bleeding	x	x	x	x	x	x	x	x	x	x
POST-TREATMENT	Initial VAS	10	5	5	7	10	10	9	10	10	8
	Bristol	3	3-4	3-4	3	3-4	4	3-4	3	3	2-3
	Need to force		x						x		x
	Tenesmus				x	x	x				
	Feeling of obstruction				x						
	Manual maneuver										
	Weekly evacuation frequency	7	5	5	7	4-5	4	3-4	3	3	4
	Bleeding							x			
	Final VAS	1	1	0	4	3	2	3	4	2	1

CONCLUSIONS

Laser phototherapy may represent a potential therapeutic alternative for anal fissure, as it resulted in significant symptomatic improvement in the preliminary data from this study.

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