



## Original article

# Effectiveness of treatment using fecal incontinence biofeedback isolated or associated with electrical stimulation<sup>☆</sup>



Suelen Melão<sup>a,b</sup>, Doryane Maria dos Reis Lima<sup>b,c,d,\*</sup>, Raphael Ferreira Ratin<sup>a,b</sup>, Gustavo Kurachi<sup>b,d</sup>, Kelli Rizzardi<sup>b</sup>, Marcieli Schuster<sup>b</sup>, Univaldo Etsuo Sagae<sup>b,d,e</sup>

<sup>a</sup> Hospital São Lucas, Cascavel, PR, Brazil

<sup>b</sup> Gastroclínica Cascavel, Cascavel, PR, Brazil

<sup>c</sup> Universidade Federal do Ceará (UFC), Fortaleza, CE, Brazil

<sup>d</sup> Faculdade Assis Gurgacz (FAG), Cascavel, PR, Brazil

<sup>e</sup> Universidade Estadual do Oeste do Paraná (UNIOESTE), Cascavel, PR, Brazil

## ARTICLE INFO

## Article history:

Received 24 February 2014

Accepted 11 August 2014

Available online 23 October 2014

## Keywords:

Fecal incontinence

Biofeedback

Anismus

## ABSTRACT

**Introduction:** The prevalence of fecal incontinence (FI) has increased in recent decades, due to an aging population; and result in negative impacts on quality of life. Therefore, it is essential to search for an effective treatment in order to minimize the morbidity caused by incontinence.

**Objective:** To evaluate the effect of perineal training in the treatment of patients with fecal incontinence by biofeedback.

**Method:** This is a prospective study which evaluated 85 patients with FI from January 2009 to January 2014, at the Coloproctology outpatient clinic of the Hospital São Lucas/Cascavel, Paraná.

**Results:** Mean age was 47 years and the duration of treatment ranged from 5 to 25 sessions (mean, 13 sessions). From the women involved in the study, 70% (50) had vaginal deliveries and 34 (40%) participants were submitted to some orificial surgery. The FI score at baseline was 10.79 (6–17) and post-treatment FI was 2 (0–14) ( $p < 0.001$ ). In the population studied, 49.4% (42) of the patients had an associated pre-BFT UI; and only 8.2% (7) had post-BFT UI ( $p < 0.001$ ).

**Conclusions:** The data presented in this study confirm that perineal training through biofeedback was effective in the treatment of patients with fecal incontinence without immediate indication for surgery, still ensuring for this technique the advantages of being effective, painless and of low cost.

© 2014 Sociedade Brasileira de Coloproctologia. Published by Elsevier Editora Ltda.

Este é um artigo Open Access sob a licença de [CC BY-NC-ND](#)

<sup>☆</sup> This study was conducted at Coloproctology Outpatient Clinic, Hospital São Lucas, Cascavel, PR, Brazil.

\* Corresponding author.

E-mail: [doryane@gmail.com](mailto:doryane@gmail.com) (D.M. dos Reis Lima).

<http://dx.doi.org/10.1016/j.jcol.2014.08.010>

2237-9363/© 2014 Sociedade Brasileira de Coloproctologia. Published by Elsevier Editora Ltda.

Este é um artigo Open Access sob a licença de [CC BY-NC-ND](#)

## Eficácia do tratamento de incontinência fecal utilizando o biofeedback isolado ou associado a eletroestimulação

### R E S U M O

#### Palavras-chave:

Incontinência Fecal

Biofeedback

Anismus

**Introdução:** A prevalência de incontinência fecal (IF) vem aumentando nas últimas décadas devido ao envelhecimento da população; e resulta em impactos negativos na qualidade de vida. Logo, torna-se fundamental a busca de um tratamento efetivo, a fim de minimizar a morbidade ocasionada pela incontinência.

**Objetivo:** Avaliar o efeito do treinamento perineal no tratamento de pacientes portadores de incontinência fecal através do biofeedback.

**Método:** Estudo prospectivo, que avaliou 85 pacientes com IF no período de janeiro de 2009 a janeiro de 2014, no ambulatório de Coloproctologia do Hospital São Lucas/Cascavel, Paraná.

**Resultados:** A média de idade foi de 47 anos e a duração do tratamento variou de 5 a 25 sessões (média de 13 sessões). Das mulheres envolvidas no estudo, 70% (50) tiveram partos vaginais e 34 (40%) indivíduos fizeram alguma cirurgia orificial. O escore de IF na avaliação inicial foi de 10,79 (6 a 17) e no pós-tratamento foi de 2 (0 a 14) ( $p < 0,001$ ). Na população estudada, 49,4% (42) dos pacientes apresentaram IU associada no pré-TBF e apenas 8,2% (7) no pós-TBF ( $p < 0,001$ ).

**Conclusões:** Os dados demonstrados neste estudo confirmam que o treinamento perineal através do biofeedback mostrou-se eficaz no tratamento de pacientes com incontinência fecal sem indicação imediata de cirurgia, assegurando ainda para essa técnica as vantagens de ser eficaz, indolor e de baixo custo.

© 2014 Sociedade Brasileira de Coloproctologia. Publicado por Elsevier Editora Ltda.

Este é um artigo Open Access sob a licença de [CC BY-NC-ND](https://creativecommons.org/licenses/by-nc-nd/4.0/)

## Introduction

Fecal incontinence (FI) is a condition that results in significant physical and psychological disability, involving complex and multifactorial mechanisms.<sup>1</sup> It is generally defined as the involuntary loss of solid and liquid feces, with or without emission of flatus. Incontinence refers to a functional change in the anorectal area, leading to a loss of control of the passage of fecal material through the anus.<sup>2</sup>

Although its prevalence is generally reported in females, in which epidemiological studies converge its results for the population over 65 years, there is a high prevalence in both men and women. However, women appear to be more susceptible, with the major risk factors being pudendal nerve or anal sphincter injury caused by obstetric trauma.<sup>2,3</sup> Regardless of its etiology, the emotional result impacts on quality of life, exceeding the limits of the physical, social, emotional and occupational domains.<sup>4</sup> It is hard to know the exact incidence of FI in the population, because in many cases the patient omits this fact. However, the effect described in the literature ranges from 0.1% to 5%.<sup>5</sup>

Paradoxical contraction of puborectal muscles, or anismus, is a pathology of idiopathic origin, affecting men and women; the anismus develops slowly and progressively, being usually accompanied by constipation. Clinically, anismus is manifested by the urge to defecate, without the ability to eliminate the whole rectal content, regardless of the degree of patient effort.<sup>6</sup>

The mechanism of anal continence depends on the integrated action of: sphincter muscles; pelvic floor muscles; presence of the anorectal inhibitory reflex; of rectal capacity, sensitivity and compliance; stool consistency and intestinal transit time.<sup>7,8</sup> As a result, any condition or disorder that alters any of these mechanisms can cause incontinence.<sup>9</sup> Therefore, it is critical to take into account the important role of the anal sphincters in preserving the continence, because with this knowledge a rehabilitation program for pelvic floor biofeedback training (BFT) can be established.

BFT is a technique that has been widespread since the late 70s, through the use of electronic equipment to inform its user, in a continuous and instantaneous way, about some of his/her internal (normal and abnormal) physiological events, in the form of visual and/or hearing signals.<sup>10</sup> This technique allows the assessment and measurement of the patient progress through monitoring the tone at rest and the contractile ability of the muscle fiber and its support. Thus, BFT is effective in the course of the treatment of neuromuscular dysfunctions, improving the mobility, flexibility, and muscular coordination.<sup>11</sup>

In this sense, BFT has been indicated in cases of mild to moderate incontinence; in the correction of severe defecation dysfunction; in cases of anismus, psychogenic megarectum (encopresis) and of chronic rectal pain; in incontinent patients without surgical indication; and, in some cases, in the postoperative phase of incontinence surgery, since studies demonstrate favorable results in improving the quality of

Download English Version:

<https://daneshyari.com/en/article/4297033>

Download Persian Version:

<https://daneshyari.com/article/4297033>

[Daneshyari.com](https://daneshyari.com)