



CASE PRESENTATION

Rehabilitation as an effective treatment for anal incontinence: case report

Rehabilitación como tratamiento efectivo de la incontinencia anal: reporte de caso

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ABSTRACT

Introduction: anal incontinence is the inability to control the release of gas or fecal matter, which can be embarrassing and impact the patient's quality of life.

Objective: to describe the case of a rehabilitated patient following a diagnosis of anal incontinence.

Case Presentation: the case of a 62 -year -old male patient who was diagnosed with colon cancer is reported and surgery was performed to remove the tumor. After this, the patient began to experience anal incontinence. It underwent pharmacotherapy, but the results were limited. Testing of muscle strength, coordination of the pelvic soil and an evaluation of the ability to

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retain feces and gases were performed. The results showed a significant decrease in the muscle force of the pelvic soil and a reduced capacity to retain feces and gases.

Conclusions: rehabilitative treatment with physical stimulation agents and pelvic soil muscles were applied. The patient achieved anal continence, which shows rehabilitation as an effective treatment.

Keywords: Therapeutic exercise; Electrotherapy; Anal incontinence; Magnetotherapy; Rehabilitation; pelvic floor

RESUMEN

Introducción: la incontinencia anal es la incapacidad de controlar la liberación de gases o heces fecales, lo que puede ser embarazoso y afectar la calidad de vida del paciente.

Objetivo: describir el caso de un paciente rehabilitado tras un diagnóstico de incontinencia anal.

Presentación del caso: se reporta el caso de un paciente masculino de 62 años que fue diagnosticado con cáncer de colon y se le realizó una cirugía para extirpar el tumor. Después de esta, el paciente comenzó a experimentar incontinencia anal. Se sometió a farmacoterapia, pero los resultados fueron limitados. Se realizaron pruebas de fuerza muscular, coordinación del suelo pélvico y una evaluación de la capacidad para retener heces y gases. Los resultados mostraron una disminución significativa en la fuerza muscular del suelo pélvico y una capacidad reducida para retener heces y gases.

Conclusiones: se aplicó tratamiento rehabilitador con agentes físicos de estimulación local y ejercicios de los músculos del suelo pélvico. El paciente logró la continencia anal, lo cual muestra la rehabilitación como tratamiento efectivo.

Palabras claves: Ejercicio terapéutico; Electroterapia; Incontinencia anal; Magnetoterapia; Rehabilitación; Suelo pélvico

INTRODUCTION

Anal or fecal incontinence is the inability to control the release of gas or feces, which can be embarrassing and affect the patient's quality of life. After colon

cancer surgery, anal incontinence may be caused by damage to the nerves or muscles in the anal area during the operation. ⁽¹⁾

This pathology constitutes a health problem that has affected humanity since ancient times. In ancient Greece, Hippocrates described anal incontinence as a condition that affected the elderly and people who had suffered injuries to the rectum. Since the 20th century, new surgical techniques and non-surgical treatments have been developed to treat anal incontinence, such as behavioral therapy and electrical stimulation of the sacral nerve. Additionally, progress has been made in understanding the causes of anal incontinence, including birth injuries, rectal surgery, and neurological diseases. ⁽²⁾

Currently, it is a common health problem in older people and women, estimated to affect between 2 and 15 % of them worldwide. Women have a higher incidence of anal incontinence than men due to factors such as pregnancy, vaginal birth and menopause. It is estimated to affect around 10 % of women of reproductive age, as well as 25 % of women over 60 years of age. ⁽²⁾

Rehabilitation therapy, including pelvic floor strengthening exercises and therapy with physical agents, may be effective in improving this condition. Additionally, changes in diet and pharmacotherapy may be necessary to achieve optimal results. ⁽³⁾

As time goes by, techniques and treatments have been developed to improve the quality of life of people who suffer from this condition. Therefore, the objective of this work was to describe the case of a patient rehabilitated after a diagnosis of anal incontinence.

CASE PRESENTATION

We report the case of a 62-year-old, white, obese male patient who was diagnosed with colon cancer and underwent a hemicolectomy to remove the tumor one month after detection. After surgery and reanastomosis, the patient began to experience anal incontinence, which significantly affected his quality of life. He underwent pharmacotherapy, but the results were limited.

The physical examination of the perineal region revealed scars in the region and a rectal examination revealed a hypotonic sphincter with a deformed anal canal and fibrosis. Pelvic floor muscle strength tests were performed, as well as an evaluation of the ability to retain stool and gas. Poor results were shown.

Among the complementary studies, a colonoscopy was performed, which returned normal results, in addition to neurophysiological studies of the pelvic floor that showed hypotonia of the anal canal and possible fibrosis component.

By decision of the medical team, he was referred to Physical Medicine and Rehabilitation, where a treatment plan was designed that included pelvic floor strengthening exercises, therapies with physical agents and changes in diet to improve the solidity of the stool. Rehabilitation consisted of local magnetotherapy with solenoids placed in the pelvic region (50 Hz at 50 % for 15 min), stimulating electrotherapy of the sphincter muscles (between 50 and 75 Hz for 5 to 15 min and intensity tolerated by the patient) with surface electrodes. , in addition to pelvic floor exercises 5 days a week.

Two months after treatment, the patient showed significant improvement in both pelvic floor muscle strength and stool and gas containment. Control of the anal sphincter was achieved and he has remained without difficulties, returning to his daily activities.

DISCUSSION

As in the case presented by Martínez Torres et al., ⁽⁴⁾ a combined treatment was applied to the patient that included electrotherapy and low-frequency magnetotherapy due to their known effects on tissue regeneration, enabling complete healing of wounds. Due to the presence of adenosine A2A agonist receptors, it stimulates antioxidant systems and modulates immune and inflammatory processes through lymphocytes, among other actions, on organs and systems.

The studies carried out by Martínez Pérez et al., ⁽⁵⁾ and Paniagua Inturias et al., ⁽⁶⁾ highlight that rehabilitation techniques cause an increase in the maximum voluntary contraction force and an improvement in the rectal perception threshold, which leads to excellent clinical results: cure in 50 % of patients and improvement in 75 %; Likewise, the effect of the treatment is maintained over time and does not present any side effects.

Some studies ^(3,7) report that pelvic floor strengthening exercises are effective treatments for anal incontinence after colon cancer surgery, since they help patients learn to control the muscles in that region. However, additional studies are needed to determine optimal treatment duration and long-term efficacy.

At present, the patient is pleased with the treatment because he was able to return to his daily life. This study and treatment regimen is continued in other

patients with similar conditions and, due to the benefits it provides, it is proposed to be tested in other patients.

CONCLUSIONS

Rehabilitative treatment was applied with local stimulation physical agents and pelvic floor muscle exercises. The patient achieved anal continence, which shows rehabilitation as an effective treatment.

BIBLIOGRAPHIC REFERENCES

1. Rubén Miravalle O, Jacinto P. Actualidad del tratamiento quirúrgico de la incontinencia anal: "No todo es para todos". Rev Argent Coloproct. [Internet]. 2021 [cited 29/02/2024]; 32(2):59–60. Available in: <https://www.revistasacp.com/index.php/revista/article/download/128/162>
2. Pascual Russo A, Milito D, Facio I, Furia M, Forestier V, Iseas S, et al. Mejor calidad de vida y menor incontinencia fecal en pacientes con cáncer de recto con la estrategia de seguimiento watch and wait. Revista de Gastroenterología de México. [Internet]. 2021 [cited 29/02/2024]; 86(4):340–347. Available in: <https://doi.org/10.1016/j.rgmx.2020.06.006>
3. Noa Pelier BY, Vila García JM. Rehabilitación física del suelo pélvico: ejercicios de Kegel y gimnasia abdominal hipopresiva. Invest Medicoquir. [Internet]. 2020 [cited 29/02/2024]; 12(3). Available in: <https://revcimeq.sld.cu/index.php/imq/article/view/654>
4. Martínez Torres J, Rodríguez Adams E, Díaz Acosta D, García Delgado J. Tratamiento de la incontinencia anal mediante rehabilitación integral del suelo pélvico. Presentación de caso. Revista Cubana de Medicina Física y Rehabilitación [Internet]. 2017 [cited 29/02/2024]; 8. Available in: <https://revrehabilitacion.sld.cu/index.php/reh/article/view/23/232>
5. Martínez Pérez C, García Coret MJ, Zaragoza Fernández C. Papel de la reparación muscular en el tratamiento de la incontinencia anal. Rev. cir. [Internet]. 2023 [cited 29/02/2024]; 75(4):270-276. Available in: http://www.scielo.cl/scielo.php?script=sci_arttext&pid=S2452-45492023000400270&ing=es



6. Paniagua Inturias S, Lara Pérez CA, Paz Caballero R. Tratamiento quirúrgico de la incontinencia anal, a propósito de un caso. Rev. Inv. Inf. Sal. [Internet]. 2023 [cited 29/02/2024]; 18(45):100-5. Available in: https://www.researchgate.net/publication/376767360_Tratamiento_quirurgico_de_la_incontinencia_anal_a_proposito_de_un_caso
7. Martínez TJ, García DJÁ, Rodríguez AEM, Díaz AD, Martínez PR, Abreu PY, et al. Eficacia de un programa de rehabilitación integral de disfunciones del suelo pélvico. Revista Cubana de Medicina Física y Rehabilitación [Internet]. 2014 [cited 29/02/2024]; 6(2):80-93. Available in: <https://www.medigraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=55892>

STATEMENT OF AUTHORSHIP

MEBF: Conceptualization, Data Curation, Formal Analysis, Research, Methodology, Project Administration, Resources, Validation, Original Draft Writing, and Writing, Review and Editing.

CONFLICT OF INTERESTS

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