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Original Article

Efficacy in the use of local anesthesia in patients with surgical intervention for the resolution of anorectal pathologies

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ABSTRACT

A prospective, comparative, longitudinal study was conducted in the period from April 2016 to January 2017 in order to determine the efficacy of local anesthesia for the surgical resolution of anorectal pathologies in surgically operated patients who attended the General University Hospital "Luis Gomez Lopez. Thus, the population was composed of patients with anorectal pathologies of low complexity, with no previous anorectal surgical history (Hemorrhoids, anal fissure, perianal fistula, hypertrophic anal papilla, perianal condyloma acuminata), which were agreed to be included in this study, without contraindications for use of local anesthesia. A non-probabilistic, intentional sample was made up of 30 patients and the anesthetic protocol was administered following an anesthetic protocol of perianal local anesthesia using anesthetic mixture (70% of 2% lidocaine + 30% of 0.5% bupivacaine) quantifying pain tolerance during the intraoperative period on the first and fifth postoperative days, as well as any adverse effects. The results were expressed in absolute numbers and percentages; a good tolerance to pain was observed with some differences related to the sex of the individuals studied; no complications were observed.

Eficácia no uso de anestesia local em pacientes com intervenção cirúrgica para resolução de patologias anorretais

Palavras-chave:
Patologias anorretais
Anestesia local
Intervenção cirúrgica

RESUMO

Esse estudo prospectivo, comparativo e longitudinal foi realizado no período de abril de 2016 a janeiro de 2017, com o objetivo de determinar a eficácia da anestesia local para resolução cirúrgica de patologias anorretais em pacientes cirurgicamente operados que compareceram no Hospital Geral Universitário Luis Gomez Lopes. Essa população se compunha de

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pacientes com patologias anorretais de baixa complexidade, sem história prévia de cirurgia anorretal (hemorroidas, fissura anal, fístula perianal, papila anal hipertrófica, condiloma acuminado perianal), com prévia concordância em participar no presente estudo e sem contraindicações para o uso de anestesia local. Foi obtida uma amostra intencional e não probabilística de 30 pacientes, e o protocolo anestésico administrado consistiu em anestesia local perianal com uma mistura anestésica (70% de Lidocaína 2% + 30% de Bupivacaina 0,5%) com quantificação da tolerância à dor durante o período intraoperatório no primeiro e quinto dias do pós-operatório, além de qualquer possível efeito adverso. Os resultados foram expressos em números absolutos e em percentuais; foi observada boa tolerância à dor, com algumas diferenças relacionadas ao gênero dos pacientes estudados. Não foram observadas complicações.

Introduction

Anorectal pathologies represent a reason for frequent consultation in the general surgeon and coloproctologist practice, with a prevalence of 4–6% of the population. Predominant frequency is found in the group between 40 and 50 years of age; In addition, the diagnosis is mostly clinical, performed with a well-developed clinical history and a complete physical examination. In most cases a surgical solution will be needed at some point in its evolution.[1]

Surgical treatment of such entities has evolved considerably over the past two decades. Outpatient surgery and local anesthesia reduce operative time, complications associated with anesthesia, length of hospital stay, and operative stress of the patients being treated.[2]

Martín stated: "In 18 years of experience, 70% of anal canal surgeries can be performed basically in outpatients using local anesthesia or posterior perineal block with a low complication rate of 0.5%".[3]

Low spinal anesthesia has historically been considered the first option in the resolution of anorectal pathologies. However, side effects such as post-spinal headache, the occurrence of postoperative urinary retention, and the risk of spinal nerve injury (with consequent temporary or permanent affectation of the bladder function) have led to the search for other techniques.[2]

Local anesthetic block has been one of the alternatives considered. It is necessary to emphasize the infrequent use of this technique, due to the fact that in our daily practice the regional anesthetic block is exclusively reserved for the interventions of minor importance, as is the resection of an anal hematoma, plicomas or hypertrophic papillae or for performing internal sphincterotomies.

Although there are studies on the use of local anesthesia for the surgical resolution of anorectal pathologies, there is no established protocol for the use of the same in hospital centers of the locality.[4–9] For this reason, a prospective, descriptive and longitudinal study was conducted, which allowed us to determine the efficacy of the use of local anesthesia in surgically operated patients for the resolution of anorectal pathologies in the General University Hospital Dr. Luis Gomez Lopez in the city of Barquisimeto, Venezuela.

Materials and methods

For the development of the present study, a prospective, descriptive and longitudinal research was carried out.

In this regard, the population was made up of 30 patients with diagnosis of anorectal pathologies with indication of surgical resolution at the General Hospital Dr. Luis Gomez Lopez de Barquisimeto, Lara State, Venezuela, in the period from April 2016 to January/2017, which met the following criteria:

Inclusion criteria

- Patients of both sexes with any anorectal pathology: hemorrhoids, anal fissure, perianal fistula, hypertrophic anal papilla, perianal condyloma acuminata.
- Candidates for elective surgery.
- Patients who give signed written consent.
- Patients without contraindications for use of local or spinal anesthesia.

Exclusion criteria

- Patients with contraindications for the use of anesthetics.
- Patients who do not provide signed written consent.

The anesthetic protocol used is detailed as follows: A mixture of 2% lidocaine and 0.50% bupivacaine in a proportion of 70–30% is used. The perianal skin is infiltrated with 10cc of said solution. Deep injection is performed by 4 tridents located at hours 3, 6, 9 and 12. Infiltration begins at hour 6, injecting 10cc in depth at this time.[10]

This procedure continues with 5cc, in the direction of hours 5 and 7, thus completing the first trident. The needle is withdrawn and hour 3 is infiltrated by injecting 5cc in depth at the aforementioned hour and 5cc in the direction of hours 4 and 2 to complete the second trident. Then, the needle is withdrawn and the same procedure is applied at hour 9 and finally 12.[10]

The total used is 75cc of the anesthetic solution. All infiltrations, except that of the perianal skin, are performed under the guidance of the index finger of the left hand placed inside the rectum. The infiltration is done by planes. The blockade of the pudendal nerves is not specifically sought.[10]