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Case Report

The use of local anesthesia and sedation in transanal hemorrhoidal dearterialization with Doppler☆

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ABSTRACT

The treatment of hemorrhoidal disease has never been as innovated as in recent decades. The transanal hemorrhoidal dearterialization with Doppler (THD) was described under general anesthesia or spinal blockage and there is no use of local anesthesia reports. This study aims to evaluate the safety of the use of local anesthesia with sedation in THD. For this purpose, two cases are reported describing the technical and safety analysis and results. Both patients were women with grade II and III hemorrhoidal disease. These patients underwent pre-anesthetic sedation with intravenous diazepam, then were positioned in lithotomy and sedated with midazolam and pethidine. The intersphincteric blockage was followed by THD with mucopexy. One patient made a small submucosal hematoma without expansion. The patients were stable and comfortable throughout the procedure. Both were discharged the next day, with regular analgesia. In the seventh postoperative day, both had mild annoyance at constant tenesmus, which was reduced gradually. The cases illustrate that THD is feasible when performed with local anesthesia and sedation, as it is safe and effective. This new technology can be incorporated into services that have a local anesthesia protocol as their standard.

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O uso da anestesia local e sedação na desarterialização hemorroidária transanal com doppler

Palavras-chave:
Desarterialização hemorroidária
Anestesia local
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Cirurgia ambulatorial

RESUMO

O tratamento da doença hemorroidária nunca foi tão inovado como nas últimas décadas. A desarterialização hemorroidária transanal é uma dessas inovações. Foi originalmente descrita sob anestesia geral ou bloqueio espinal e não há relatos de utilização de anestesia local. Assim, este estudo visa avaliar a segurança do uso da anestesia local com sedação na desarterialização hemorroidária transanal. Para tal, dois casos são relatados com descrição da técnica e análise da segurança e resultados. Ambas pacientes eram mulheres com doença hemorroidária grau II e III. Foram submetidas à indução anestésica, posicionadas em litotomia e sedadas com midazolan e petidina. Realizou-se bloqueio interesfincteriano seguido de desarterialização hemorroidária transanal com doppler associado a mucopexia. Uma das pacientes fez um hematoma submucoso pequeno, sem expansão. As pacientes ficaram estáveis e confortáveis durante todo o procedimento. Ambas receberam alta no dia seguinte, com analgesia habitual. No sétimo dia do pós-operatório, ambas apresentavam incômodo leve pelo tenesmo constante, que foi reduzindo gradualmente. Os casos ilustram que a desarterialização hemorroidária transanal é factível quando realizada com anestesia local e sedação, visto que é segura e eficaz. Esta nova tecnologia pode também ser incorporada aos serviços cujo protocolo de anestesia local seja padrão.

Introduction

The treatment of hemorrhoidal disease has never been more innovative than in the last decades. This stems from a better understanding of the pathophysiology of this disease and from the technological acquisition. Among the most modern techniques, mechanical anopexy (PPH® or EEA®) and transanal hemorrhoidal dearterialization (THD® or Minipex®) are the most commonly used procedures.

In practice, this has led to an increase in surgical-hospital costs, which should be weighed against the reduction of the great social impact classically raised by resection techniques. In contrast, hemorrhoidectomy has always been inviting for the practice of local anesthesia, with the goal of reducing costs. Several health services defend this anesthetic technique as a standard, which is really interesting, given the Brazilian reality, where anesthetists, beds, and resources are scarce.

Thus, will the acquisition of these new technologies lead to the end of the orificial surgery with local anesthesia? Will those services where local anesthesia is the medical standard be far from the acquisition of new technologies, by technical restriction?

Objective

To evaluate the safety of the use of local anesthesia with sedation in transanal hemorrhoidal dearterialization (THD) with Doppler.

Method

This is a report of two cases of transanal hemorrhoidal dearterialization with Doppler under local anesthesia and sedation, in January 2016 at Hospital Heliópolis, São Paulo, with a description of the technique and analysis of safety and results.

Results

Two female patients aged 64 and 68 years, had grade-II and -III hemorrhoidal disease, with complaints of hematochezia, anal discomfort, and prolapse. Both had regular bowel habit and history of ex-smokers and multiparity.

Diazepam 5 mg was administered as a pre-anesthetic medication and, in the operating room, these patients were monitored with cardiac monitor, pulse oximetry and sphygmomanometer, under nebulization of supplemental oxygen. After positioning in lithotomy, the patients were sedated with midazolam 3–5 mg associated with pethidine 20–50 mg. Sedation was accompanied by a surgical team physician (a non-anesthesiologist) and performed according to the patient's systemic response (vital signs and verbal response). Following the protocol, midazolam 2 mg and 20 mg pethidine were started, with the addition of the optimum dose.

After asepsis, antisepsis, and placement of sterile fields, local intersphincteric anesthesia was started with 2% lidocaine 10 mL and a 0.5% bupivacaine (same volume), both without a vasoconstrictor. For this purpose, a 13 mm × 0.45 mm needle was inserted in the posterior medial line and then in the anterior line, to instill 0.5 mL of the solution at each point, with the aim of causing an anesthetic button for subsequent introduction of a larger-caliber needle. Then, a 32 mm × 0.7 mm needle connected to a 20-mL syringe containing the described solution was introduced in a fan-shaped way, at the 45° position toward the ischial tuberosity. Thus, the entire anal circumference is anesthetized with 5 mL of the solution at each point: right and left side initially by the posterior medial region and then by the anterior medial region.

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