Nitroglycerin and Lidocaine Topical Treatment for Anal Fissure

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Anal fissure (a tear in the anal canal) causes an involuntary contraction of the anal sphincter muscle that almost always produces intense pain. About 235,000 new cases of anal fissure occur each year in the United States. In about 40% of those cases, the fissure persists for months to years. Although sitz baths, modified diet, topically applied steroids or anesthetics, and laxatives are used as treatments, only internal lateral sphincterotomy is routinely successful in the repair of recurrent or chronic anal fissure. However, as many as 35% of patients who undergo that surgery become incontinent. Nitroglycerin, a potent dilator of blood vessels, relaxes the internal sphincter surrounding the blood vessels that nourish anal tissue. The relaxation of the sphincter muscle decreases anal tone and promotes the blood flow that nourishes anal tissue, which facilitates healing.

One of our patients, a Caucasian male who is 46 years of age, enjoyed walking regularly and hunting wild game each fall. He had no family history of anal fissure or colon disease. However, his brother is currently experiencing the symptoms of anal fissure, and treatment with hydrocortisone has failed. Approximately 18 months ago, the patient, who had noticed blood in his stool, visited his physician. Consuming more dietary fiber had caused an increase in that blood. The patient was diagnosed as having anal fissures, and his physician prescribed a 15- to 30-minute sitz bath twice daily. Because of the pain he endured and his weight-lifting restriction, he was unable to hunt for the last two fall seasons, which disappointed him greatly.

After 1 year of having managed the disorder with sitz baths and limited weight lifting, which in combination had reduced but not eliminated rectal bleeding, this patient suddenly noted an increase in the amount of blood in his stool. Evaluation revealed that the fissure had extended into the colon. His physician prescribed hydrocortisone 2.5% ointment to be applied twice daily intra-anally for 1 week, but that treatment was ineffective.

The patient’s physician then prescribed, as a method of chemical sphincterotomy, nitroglycerin 0.2% and lidocaine 2% in an ointment base that was to be applied twice daily for 14 days. The patient was instructed to wear a finger cot on which a dot of ointment had been placed, to apply the ointment to his rectum, and then to wash his hands thoroughly.

Two days after this treatment was initiated, the patient claimed that after 3 applications of the ointment, the rectal bleeding stopped and the level of pain was reduced. On day 13 of therapy, he reported that he still experienced pain but that bleeding had not recurred. His physician prescribed 1 tablet of hydrocodone/acetaminophen (Vicodin) to be taken every 6 hours as needed; this provided some pain relief. The pain then began to radiate to the patient’s groin. He underwent magnetic resonance imaging, which revealed osteoarthritis of the lower back. His physician prescribed 1 tablet of ibuprofen 800 mg to be taken twice daily as needed. After having applied the rectal ointment twice daily for 2 weeks, he continued to apply the ointment once daily for 7 days. At the conclusion of that week, both the rectal bleeding and the pain had resolved. At the time of this writing (3 months after the initiation of treatment with the nitroglycerin 0.2% and lidocaine 2% ointment), the rectal bleeding has not recurred, and this patient is relatively pain free, except for lower back pain caused by osteoarthritis. He is no longer required to lift less than 10 pounds and will...
resumes hunting in the fall of 2002. He is very pleased with the outcome of his treatment and continues to use nitroglycerin 0.2% and lidocaine 2% ointment to his brother.

References

Progesterone Transdermal Gel in the Treatment of Premenstrual Dysphoric Disorder

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Premenstrual dysphoric disorder (PMDD) is characterized by dysphoria (depressed or labile mood, anxiety, tension, and upset) that occurs during the last week of the luteal phase of the menstrual cycle. The distinguishing feature of PMDD is the cyclical nature of the symptoms and the improvement produced in the symptoms of PMDD are similar in severity to the symptoms of PMDD in two of our patients.

A thin (body fat, 15%) adolescent of 18 years of age from 18 to 45 years. Forty of those patients treated by our practice experienced the symptoms of PMDD at least every 2 to 3 months but experienced the symptoms of PMDD during every month in which she menstruated. Now, 7 days before the estimated date of menstruation and/or “when she feels her symptoms worsening,” she applies 25 mg (0.05 mL) of progesterone transdermal gel 50 mg/0.1 mL daily (morning and night) to the dorsal side of one hand. The symptoms of PMDD resolved completely with this treatment.

References

Results and Conclusions: Literature Abstracts from Mene


The authors of this article describe a 32-year-old woman with a history of systemic sarcoidosis and common variable immunodeficiency. Sarcoidosis is a multisystem disorder of unknown origin that is characterized by epithelioid granulomas exhibiting little or no necrosis. This patient was afflicted with recurrent, multiple, soft, erythematous, necrotic violaceous nodules on the back of her right hand. The nodules responded to phono

The randomized controlled clinical trial aimed to evaluate the effect of combination therapy with ciprofloxacin-dexamethasone on the symptoms of PMDD in two of our patients.

Case 1
An 18-year-old adolescent who experienced menarche at the age of 13 became our patient when she was 16 years of age. At the time of this writing, her weight and height are normal for her age, and her menstrual cycle ranges from 28 to 30 days. Three days before she menstruates, the patient regularly experiences the symptoms of PMDD: irritability, lability, lethargy, changes in sleep patterns and appetite, bloating, and migraine. The administration of a progesterone transdermal gel 50 mg/0.1 mL was prescribed, 25 mg (0.05 mL) to be applied twice daily (morning and night) to the dorsal side of one hand. This treatment resulted in the complete resolution of the symptoms of PMDD for this patient.

Case 2
A thin (body fat, 15%) adolescent treated by our practice experienced menarche at the age of 14½ years. Probably as a result of insufficient body fat and a low level of estrone, she menstruates only every 2 to 3 months but experiences the symptoms of PMDD during every month in which she menstruates. Now, 7 days before the estimated date of menstruation and/or “when she feels her symptoms worsening,” she applies 25 mg (0.05 mL) of progesterone transdermal gel 50 mg/0.1 mL daily (morning and night) to the dorsal side of one hand. The symptoms of PMDD resolved completely with this treatment.

References

Results and Conclusions: Literature Abstracts from Medline


The authors of this article describe a 32-year-old woman with a history of systemic sarcoidosis and common variable immunodeficiency. Sarcoidosis is a multisystem disorder of unknown origin that is characterized by epithelioid granulomas exhibiting little or no necrosis. This patient was afflicted with recurrent, multiple, soft, erythematous, necrotic violaceous nodules on the back of her right hand. The nodules responded to phonophoresis after treatment with topical ciprofloxacin-dexamethasone was unsuccessful. However, nodules appeared on other parts of this patient’s body after phonophoresis was terminated. CONCLUSION: Phonophoresis had a localized rather than a systemic effect.


The purpose of the randomized controlled clinical trial described in the article was to determine the efficacy of a combination of ciprofloxacin 0.3% and dexamethasone 0.1% eyedrops in controlling immediate inflammation after cataract surgery. The study consisted of 61 patients; 31 were treated with a combination of ciprofloxacin-dexamethasone suspension (the study group), and 30 were treated with a standard formulation of betamethasone and neomycin eyedrops (the control group). Pain, lid edema, lacrimation, conjunctival congestion, aqueous flare and cells, and side effects were noted 1 and 7 days after sur-

gery. A conjunctival swab for bacteria and a fungus culture were sent for evaluation 7 days after surgery. The results of the trial indicated that 7 days after surgery, there was no statistically significant difference between the groups studied with respect to the degree of lid edema, conjunctival congestion, anterior segment inflammation, and visual acuity. Two patients in the study group noted white deposits in and around the surgically treated eye that resolved after the dose of ciprofloxacin-dexamethasone suspension was reduced. No patient reported or experienced an allergic reaction to either drug combination. CONCLUSION: The combination of ciprofloxacin-dexamethasone was effective in controlling inflammation after cataract surgery.


In this article, the authors present the treatment of a 22-year-old man with hypogonadotropic hypogonadism who was receiving hormone replacement therapy. The patient refused to self-administer the injections because of concern regarding the size of the transdermal patches were then prescribed. He then experienced a pruritic, macular, erythematous rash under the reservoir area of patches containing two different transdermal formulations. The rash did not improve after pretreatment with topical corticosteroids. Because of this, the patient tolerated the application of a testosterone gel, and his serum testosterone level returned to normal after 1 month of that therapy. The authors also reviewed commercially available and investigational testosterone products and therapeutic monitoring guidelines for androgen replacement. CONCLUSION: In the patient described, treatment with testosterone gel did not produce a rash and resulted in an increase in serum testosterone level at 1 month of therapy.


The objective of this 3-month preliminary study was to evaluate the psychological side effects produced by a transdermal natural progesterone gel used as hormone replacement therapy. The study consisted of 49 women who ranged in age from 18 to 45 years. Forty of those women exhibited hypothalamic amenorrhea and 9 had primary ovarian failure. Estrogenized patients applied vaginal progesterone gel (4% or 8%) every evening for 10 days each month. The facial symptom scores for normalization, obsessiveness-compulsion, interpersonal sensitivity, depression, and anxiety. CONCLUSION: Transvagal natural progesterone gel is an effective alternative to oral progesterone for women receiving hormone replacement therapy.