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Literature search results

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Search details

Risk of bleeding in patients with haemorrhoids treated with rubber band ligation and taking warfarin or other anti-coagulant

Resources searched

MEDLINE; EMBASE; CINAHL; National Library for Health; NHS Evidence; Cochrane Library; TRIP database; Google Scholar; Google Advanced Search

haemorrhoid*; haemorrhoid*; HEMORRHOIDS; piles; “rubber band ligation”; rubber; band*; ligation; LIGATION; warfarin*; WARFARIN; anticoagulant*; ANTICOAGULANTS; anti-coagulant; “anti coagulant”; antithrombotic; “antiplatelet; anti-platelet; “anti platelet”; PLATELET AGGREGATION INHIBITORS; bleed*; haemorrhage; hemorrhage; HEMORRHAGE; GASTROINTESTINAL HEMORRHAGE

Summary

None of the guidelines and evidence based reviews listed detail the risk of bleeding after rubber band ligation on warfarinised patients.

The risk of bleeding following rubber band ligation of internal hemorrhoids is about 1%-2%. This risk may be increased in patients taking antithrombotic therapy.

Holding antithrombotic medication following banding appears to equalize the risk of bleeding to that of patients not taking antithrombotic medications. Patients on clopidogrel experienced 50% of the significant bleeding episodes and 18% of the insignificant bleeding episodes.¹
Higher bleeding rates were encountered with the use of acetylsalicylic acid/nonsteroidal anti-inflammatory drugs and warfarin. Time to recurrence was less with subsequent treatment courses.  

Two, on oral anticoagulants, recovered from bleeding complications.  

**Guidelines**

**American Gastroenterological Association Institute**

American Gastroenterological Association medical position statement: diagnosis and treatment of hemorrhoids 2004  

**American Society of Colon and Rectal Surgeons**

Practice parameters for the management of hemorrhoids (revised) 2005

**Evidence based reviews**

**Cochrane Database of Systematic Reviews**

Conventional versus LigaSure hemorrhoidectomy for patients with symptomatic hemorrhoids 2009  

Stapled versus conventional surgery for hemorrhoids 2006  

Rubber band ligation versus excisional haemorrhoidectomy for haemorrhoids 2005  

Conservative management of symptomatic and/or complicated haemorrhoids in pregnancy and the puerperium 2005

**Centre for Reviews and Dissemination**

A systematic review of stapled haemorrhoidectomy 2004  

Comparison of hemorrhoidal treatment modalities: a meta-analysis 1996

**Published research**

1. Risk of late bleeding following hemorrhoidal banding in patients on antithrombotic prophylaxis  

**Author(s):** Nelson R.S., Ewing B.M., Terment C., Shashidaran M., Blatchford G.J., Thorson A.G.  

**Citation:** American Journal of Surgery, December 2008, vol./is. 196/6(994-999), 0002-9610  

**Publication Date:** December 2008  

**Abstract:** Background: The risk of bleeding following rubber band ligation of internal hemorrhoids is 1%-2%. This risk may be increased in patients taking antithrombotic therapy. The goal of the current study was to find a safer approach to banding without increasing the risk of bleeding. Methods: This retrospective review identified patients undergoing banding while on antithrombotic therapy. These medications were held for 7-10 days following the procedure. The number of bands placed while on antithrombotic therapy and their post band complications were recorded. Results: There were 605 bands placed on 364 patients taking antithrombotic medications. There were 23 complications involving bleeding, a value that was not statistically different from those not taking antithrombotic therapy. Patients on clopidogrel experienced 50% of the significant bleeding episodes and 18% of the insignificant bleeding episodes. Conclusions: Holding antithrombotic medication following banding appears to equalize the risk of bleeding to that of patients not taking antithrombotic medications. Patients taking clopidogrel may be at higher risk for bleeding.
complications. copyright 2008 Elsevier Inc. All rights reserved.

Source: EMBASE


Author(s): Beattie GC, Rao MM, Campbell WJ

Citation: Ulster Medical Journal, November 2004, vol./is. 73/2(139-41), 0041-6193

Publication Date: November 2004

Source: MEDLINE

Full Text: Available in fulltext at National Library of Medicine

3. Long-term outcome of rubber band ligation for symptomatic primary and recurrent internal hemorrhoids.

Author(s): Iyer VS, Shrier I, Gordon PH

Citation: Diseases of the Colon & Rectum, August 2004, vol./is. 47/8(1364-70), 0012-3706

Publication Date: August 2004

Abstract: PURPOSE: Rubber band ligation therapy for symptomatic hemorrhoidal disease has been used for many years and is a well-accepted treatment modality, but information on long-term outcome is limited. Our goals were to determine safety and long-term efficacy of this treatment. METHODS: A retrospective chart review of patients undergoing rubber band ligatures for symptomatic internal hemorrhoids in a single practice was conducted. Information on presenting symptoms, number of bands applied, response to therapy, complications encountered, length of follow-up, interval to recurrent symptoms when applicable, and subsequent therapy were documented. Supplemental information was obtained from telephone follow-up. Outcome was categorized as success or failure, in which success was defined as: permanent relief of symptoms for follow-up period; marked improvement in symptomatology with rare manifestation of bleeding (< or = 1/month); symptom relief for a limited period of time (> or = 100 days), and failure was defined as: modest improvement (decreased but not relief of symptoms); or no improvement in symptoms. RESULTS: A total of 805 patients underwent 2,114 rubber band ligatures. Most common presenting symptoms were bleeding in 731 patients (90.8 percent) and prolapsing in 382 patients (47.5 percent). The median number of bands placed was two (range, 1-17). The median time between bandings was 4.7 (range, 1.1-35.6) weeks. Median follow-up time was 1,204 (range, 14-9,571) days. Excluding 104 patients lost to follow-up (never returned after initial treatment), success was obtained in 70.5 percent (494/701) and failure in 29.5 percent (207/701) of patients. Success rates were similar for all degrees of hemorrhoids. Hemorrhoidal disease requiring the placement of four or more bands was associated with a trend in higher failure rates and greater need for subsequent hemorroidectomy. Complications per treatment series included bleeding (2.8 percent), thrombosed external hemorrhoids (1.5 percent), and bacteremia (0.09 percent). Higher bleeding rates were encountered with the use of acetylsalicylic acid/nonsteroidal anti-inflammatory drugs and warfarin. Time to recurrence was less with subsequent treatment courses. Treatment of recurrent symptoms with rubber band ligation resulted in success rates of 73.6, 61.4, and 65 percent for first, second, and third recurrences respectively. This resulted in a cumulative success rate of 80.2 percent for this method of treatment. CONCLUSIONS: Rubber band ligatures are safe and effective therapy for symptomatic internal hemorrhoids. It can be used to treat all degrees of hemorrhoids with similar effectiveness. The likelihood of success is lower if more than four bands are needed to
eliminate symptoms. The use of acetylsalicylic acid/nonsteroidal anti-inflammatory drugs and warfarin is associated with higher bleeding rates. Rubber band ligatures for recurrence of symptoms is effective; however, time to recurrence is less with subsequent treatments.

Source: MEDLINE

Full Text:
Available in print at Grantham Hospital Staff Library

☐ 4. Significant bleeding following rubber band ligation of haemorrhoids in anti-coagulated patients

Author(s): Soulsby R.H.R., Donovan I.A.
Citation: Colorectal Disease, 2000, vol./is. 2/6(369-370), 1462-8910
Publication Date: 2000
Source: EMBASE
Full Text:
Available in print at Grantham Hospital Staff Library
Available in print at Lincoln County Hospital Professional Library


Author(s): Marshman D, Huber PJ Jr, Timmerman W, Simonton CT, Odom FC, Kaplan ER
Citation: Diseases of the Colon & Rectum, May 1989, vol./is. 32/5(369-71), 0012-3706
Publication Date: May 1989
Abstract: Two hundred forty-one patients undergoing hemorrhoidal rubber band ligation over a five-year period were reviewed to focus on complications. Three patients (1.2 percent) were hospitalized. Two, on oral anticoagulants, recovered from bleeding complications. One patient developed a band-related abscess that resolved with drainage. Twenty patients (8.3 percent) reported pain associated with the procedure. Three patients went on to subsequent surgical hemorrhoidectomy. There were no deaths in the series. This report agrees with previously published series highlighting the efficacy and cost containment of hemorrhoidal ligation. Continued reliance on this approach to hemorrhoidal disease is justified.
Source: MEDLINE