



## Haemorrhage Occluder Pin

Product overview



## Description

The Haemorrhage Occluder Pin is designed to control severe presacral haemorrhage during pelvic surgery.

- Serrated Titanium Pin for Secure Placement
- The Haemorrhage Occluder Pin is made of titanium, a biocompatible metal commonly used for internal implants.<sup>5</sup> The shaft of the Haemorrhage Occluder Pin is serrated for more secure placement in the sacrum. Research has shown that significantly more force is required to extract a serrated pin than a smooth one.<sup>11</sup>
- Malleable Applicator for Efficient Placement
- The Haemorrhage Occluder Pin comes preloaded in an easy-to-use applicator. The long, 12 inch shaft of the applicator is malleable and provides the surgeon with optimum visibility for precise pin placement at the bleeding site.
- Available in two sizes
- CR1007 - Standard Pin Head - 10mm
- CR1014 - Large Pin Head - 14mm



## Indications

- The Haemorrhage Occluder Pin is indicated for the control of localized severe haemorrhage from the presacral area during surgery. The Pin should be used when other techniques (cautery, suture, clamping, etc.) are judged ineffective.

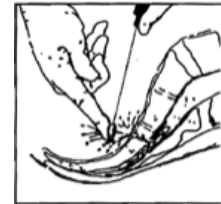
## Contraindications

- Bleeding deemed controllable by direct suture or electrocautery.
- Severe instability of the patient as measured by severe haemorrhage or hypotension.
- Bleeding further than 2 cm from the midline. Bleeding that appears to originate from a sacral neural foramen or a vital structure such as a ureter, rectum, or vagina.
- Diffuse haemorrhage related to a systemic coagulation disorder not controllable by fingertip pressure against the anterior surface of the sacrum.

## Instructions for use\* (see image)



- When the bleeding is controlled, prepare the preloaded sterile applicator for use by bending the malleable shaft as desired.
- Clear the surgical field of blood and clot, and retract adjacent organs for optimal visibility of the presacral area.
- Rapidly withdraw the haemostatic finger and place the Haemorrhage Occluder Pin directly over the bleeding area. Apply fingertip pressure to the head of the Pin, pushing it into the bone. Apply direct and steady pressure until the Pin is fully seated with the head of the Pin flush with the bony cortex. (Surgin offers the Salgado Driver to assist in fully seating the head of the Pin flush with the bony cortex- see Salgado Driver on this webpage)
- Consider placement of a second Pin if the bleeding continues and appears to be emanating from a second site. Avoid overlapping Pin heads.
- How Supplied
  - Each Pin is preloaded in its own applicator, individually packaged and STERILE.
  - Two Pins are supplied per box.
  - Single use only.
- Complications
  - Complications may result from the use of this product. They depend upon the patient's degree of intolerance to any foreign object implanted in the body.
- Caution: Reuse or re-sterilization of this device may result in operational failure, injury, and/or risk of infection to the patient.
- \* A variety of surgical techniques may be used when implanting the Haemorrhage Occluder Pin. Therefore, the surgeon is advised to use the method which his/her own practice and discretion dictate to be best for the patient



- Wang Q., Shi W., Zhou W., He Z., "New Concepts in Severe Presacral Hemorrhage During Proctectomy," Arch Surg., 1985:1120:1013-1020.
- Abrahms, H.L.: "The Vertebral and Azygos Venous Systems and Some Variations in Systemic Venous Return," Radiology, 1957:69:508-526.
- Baston, O.V.: "The Role of the Vertebral Vein in Metastatic Process." Ann. Intern. Med., 1942: 16:38-45.
- Bearhs, O.H., Beart, R.W.: "Miles Abdominoperineal Resection," Abdominal Operation, ed 7, DS New York, Appleton-Century-Croft, 1979, vol 2, pp 2242-2254.
- Dougherty, S.H., Simmon R.L.: "Infections in Bionic Man: The Pathobiology of Infections in Prosthetic Devices," Curr. Probl. Surg., 1982: 221-264
- Krause, U., Pahlman L, Phoren L.: "Abdominoperineal Excision" World Surg., 1982:6:549-553.
- Nivatvongs, S., Fang D.T.: "The Use of Thumbtacks to Stop Presacral Hemorrhage," Dis. Col. & Rect., 1986: September, pp 589-90.
- Norgore, M.: "Clinical Anatomy of the Vertebral Veins," Surgery, 1945:17:606-611.
- Qinyao, W., Weijin, S., Youren, Z., Zhengrui, H., "New Concepts in Severe Presacral Hemorrhage During Protectomy," Arch Surg., 1982:19:1013-1020.
- "Remarks about Severe Presacral Hemorrhage," Editorial: Pract. Surg., 1981:1:293.
- Stolfi, V.M., Milsom, J., Church, J.: "Newly Designed Occluder Pin for Presacral Hemorrhage." Dis. Col. & Rect., 1992, Feb. pp 166-169.
- Welch, C.E., Ottinger, L.W., Welch, J.P.: "Cancer of the Rectum and Anus," Manual of Low Gastrointestinal Surgery, New York, Springer-Verlag Inc., 1960, pp 81-89

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