BARD* MK*† PATCH
with Posiflex* Memory Technology

Bard* **MK*†** Patch with
Posiflex* Memory Technology

TECHNIQUE GUIDE

Anterior Approach to a Preperitoneal Inguinal Hernia Repair

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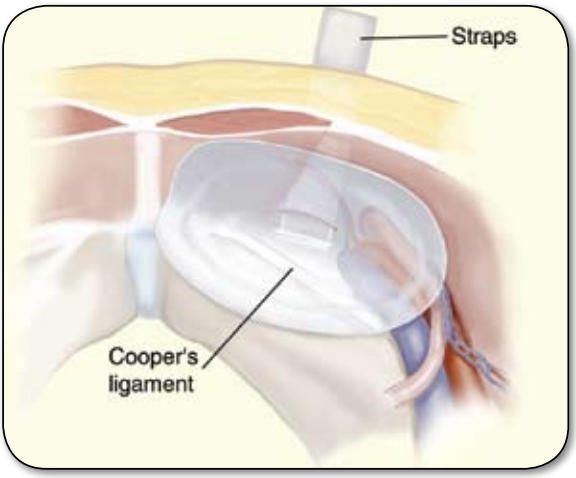
Benefits of the Bard* MK*† Patch with Posiflex* Memory Technology

Total Confidence

- The Posiflex* Memory Technology helps to avoid buckling and folding of the mesh, which helps the patch lay flat in the preperitoneal space
- Patch covers the entire groin region, including the direct, indirect and femoral spaces, minimizing the risk of recurrence or missed hernias
- Biomechanics of intra-abdominal pressure help secure the patch in place[1]

Patient Comfort

- Technique can be performed through one small 4-6cm incision
- Minimal fixation may reduce post-operative pain and the risk of neuralgia[2]
- A tension-free repair technique minimizes patient discomfort and provides the potential for rapid return to normal activity[3]
- General anesthesia is not required



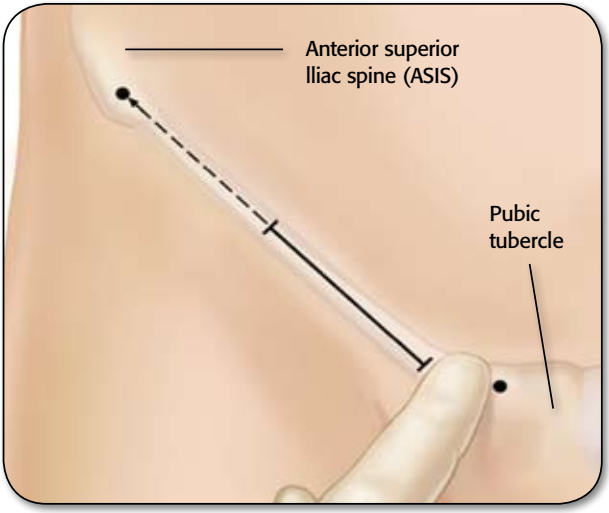
The three larger sizes cover the entire groin region including the direct, indirect and femoral spaces, and, therefore, an onlay patch is not required.

The Bard* **MK***† Patch with Posiflex* Memory Technology repair is a minimally invasive, tension-free technique that can be completed through a small 4-6cm incision and requires minimal suturing. It is a preperitoneal repair performed through an open, anterior approach that can be completed using local or regional anesthesia.

The Bard* **MK***† Patch is a self-expanding polypropylene patch that allows for sufficient overlap of the hernia defect. Tissue ingrowth into the polypropylene mesh and deep placement of the patch allow for a strong repair. Once the patch is placed, the Posiflex* Memory Technology helps to avoid buckling and folding – which helps the patch lay flat in the preperitoneal space.

The entire groin region, including the direct, indirect and femoral spaces, is typically protected, therefore, the optional onlay patch packaged with each Bard* **MK***† Patch is not required. A positioning strap and pocket facilitate placement, positioning and fixation of the device.

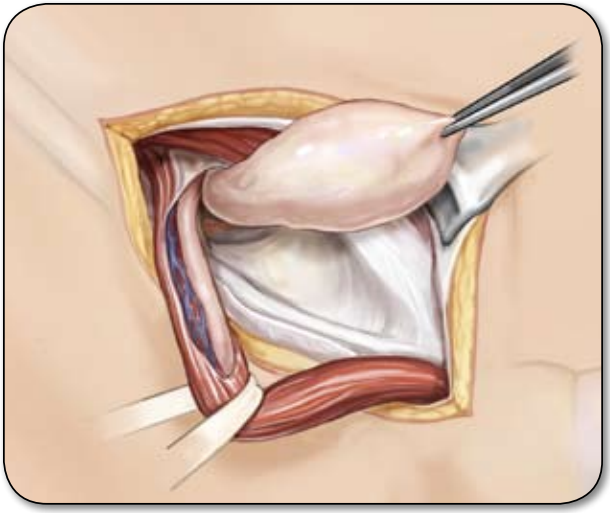
Technical Steps to the Procedure



1

Entry into Inguinal Canal

- Mark the anterior superior iliac spine and the pubic tubercle.
- Make a 4-6cm oblique incision one finger width up from the pubic tubercle extending towards the anterior superior iliac spine.
- Enter the inguinal canal through the external oblique.

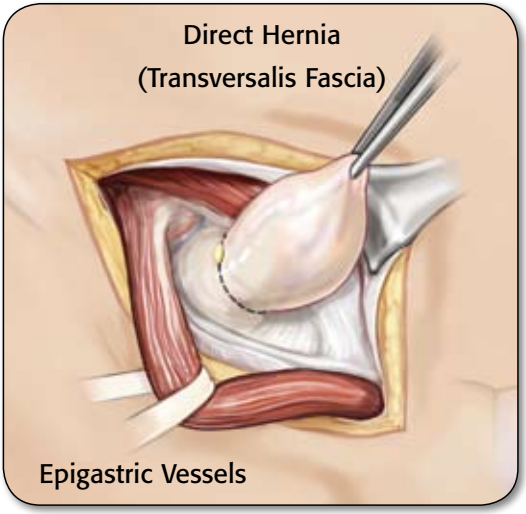


2

Dissect and Reduce the Hernia Sac

Indirect Inguinal Hernia Repair

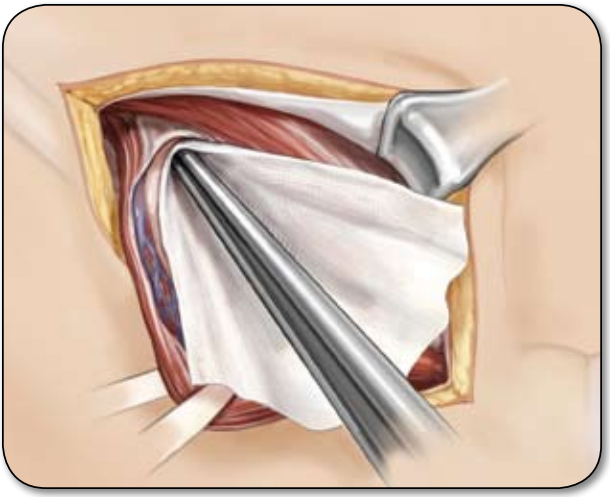
- Mobilize the spermatic cord and separate the cremasteric fibers.
- Using a high dissection, free the hernia sac from the cord structures. Complete the dissection below the point where the vas deferens and testicular vessels diverge to help reduce the risk of the sac slipping under the mesh, creating a potential recurrence.
- Reduce the hernia sac through the internal ring.



Direct Inguinal Hernia Repair

- Mobilize the spermatic cord and dissect the hernia sac to the base of Hesselbach's triangle.

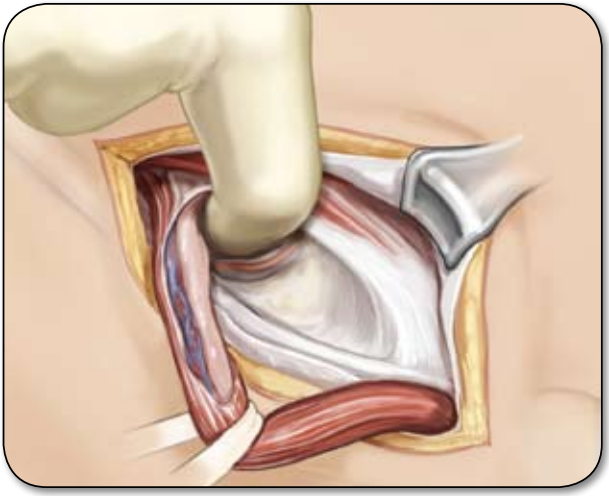
- Circumscribe the transversalis fascia at the base of the hernia and reduce the hernia sac into the preperitoneal space.



3A

Initiate the Preperitoneal Pocket

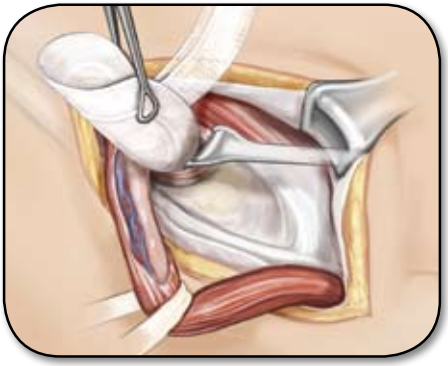
- Insert one or more 4" x 4" gauze sponge(s) to actualize the preperitoneal space. Remove sponges prior to placing the patch.



3B

Complete the Preperitoneal Pocket

- Locate and retract the inferior epigastric vessels (medial to the internal ring and lateral to the direct space).
- Using blunt dissection, extend the pocket by separating the preperitoneal fat from the posterior transversalis fascia, staying inferior to the epigastric vessels and the spermatic cord.
- Sweep medially and then laterally to create a pocket just large enough to accommodate the patch.

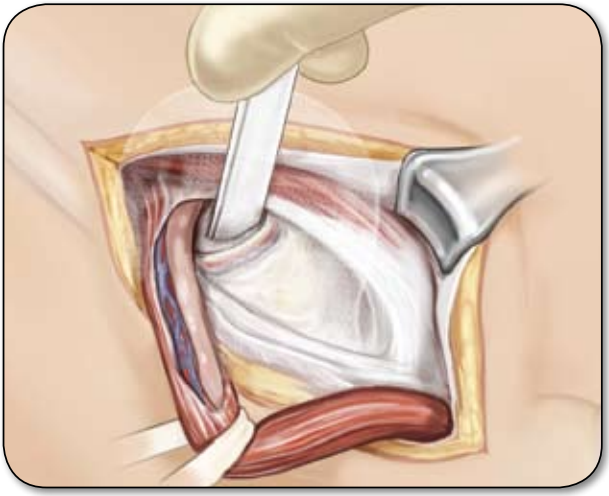


4A

Insertion of the Bard® MK*† Patch

- Fold the patch up in a "taco-like" fashion and grasp with sponge forceps, keeping the positioning strap outside the body.
- Continue to retract and elevate the epigastric vessels while placing the patch.
- Insert the patch into the preperitoneal space medially toward the pubic tubercle and then laterally toward the anterior superior iliac spine.
- The patch should lie between the cord and the peritoneum and deep to the epigastric vessels.
- The Posiflex® Memory Technology will allow the patch to spring open.

NOTE: *A malleable retractor used like a "shoe horn" can facilitate insertion of the mesh.*

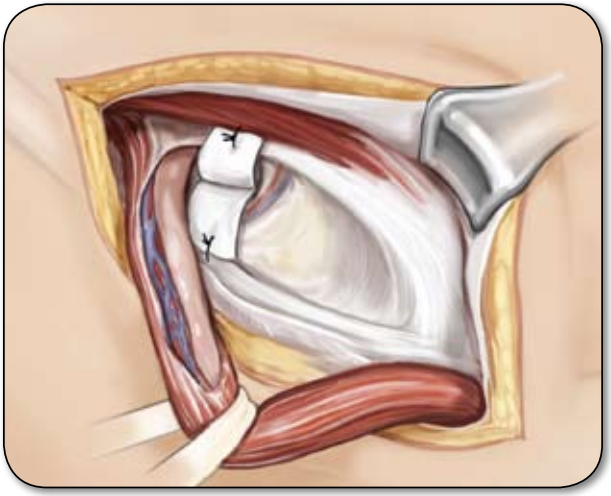


4B

Complete Insertion of the Patch

- Pull up on the positioning strap to center and hoist the patch up against the posterior wall.
- While pulling up on the positioning strap, slide a forefinger into the positioning pocket and sweep circumferentially to ensure the patch is lying flush against the posterior inguinal wall.

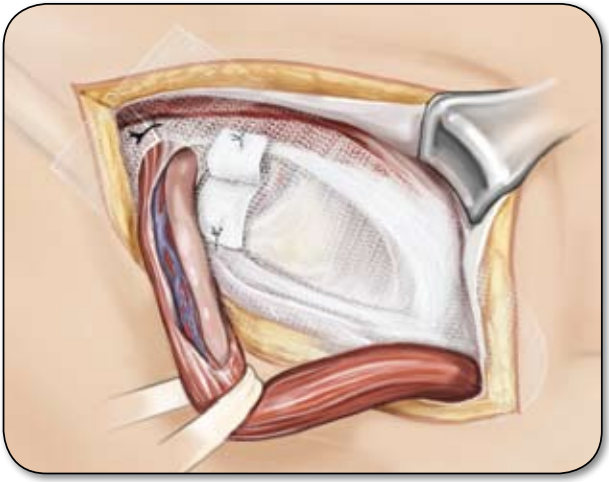
NOTE: *If the patch does not open completely, the dissection is probably incomplete. Running a finger along the periphery of the patch to perform additional dissection will typically correct this situation. Otherwise, remove the patch and extend the dissection.*



5

Fixation

- Pull the straps apart and suture one strap to the conjoined tendon and the second strap to the shelving edge of the inguinal ligament.
- Avoid suturing the straps in the area of the epigastric vessels and surrounding nerves.
- Cut off excess strap material and discard.



6

NOTE: *The onlay patch is not required when the Bard® **MK**®† Patch covers the entire groin region.*

Placement of the Optional Onlay Patch

- Bluntly dissect a pocket under the external oblique to make room for the optional onlay patch.
- Create a keyhole in the patch to accommodate the spermatic cord.
- Secure the tails of the patch loosely around the spermatic cord with 1 or 2 tacking sutures.
- Lay the patch on the inguinal floor so it extends approximately 2cm beyond the pubic tubercle and 2cm lateral to the internal ring.
- It is not necessary to suture the onlay patch to the fascia.

Indications

The Bard* **MK***† Patch is intended for use in hernia repair requiring reinforcement with a non-absorbable support material.

Contraindications

1. Do not use the Bard* **MK***† Patch for applications in infants or children, whereby future growth will be compromised by use of such mesh material.

2. Literature reports there may be a possibility for adhesion formation when Bard* **MK***† Patch is placed in contact with the bowel or viscera.

Warnings

1. **Do not cut or reshape the Bard* MK*† Patch (as this could affect its effectiveness) except for the monofilament positioning strap. Care should be taken not to cut or nick the PET recoil ring. If the recoil ring is cut or damaged during insertion or fixation, additional complications may include bowel or skin perforation and infection.**

2. **Excess positioning strap material above the fixation point must be cut off and discarded to eliminate excess material from remaining in the body.**

3. **The device is supplied sterile. Inspect the**

Warnings (cont.)

packaging to be sure it is intact and undamaged prior to use.

4. This device is for single use only. Do not re-sterilize or reuse any portion of the Bard* **MK**[*†] Patch.

5. Careful attention to the Bard* **MK**[*†] Patch handling and fixation technique is most important in the presence of known, or suspected, wound contamination or infection

6. If an infection develops, treat the infection aggressively. The prosthesis may not have to be removed. An unresolved infection, however, may require removal of the prosthesis.

7. Where previous surgery has been performed in that region of the preperitoneal space (i.e., radical prostatectomy, previous preperitoneal herniorrhaphy), repair of the hernia may be more difficult.

8. To prevent recurrences when repairing hernias, the prosthesis should be large enough to extend beyond the margins of the defect.

9. To ensure a strong repair, the prosthesis should be secured with tacks or sutures through the polypropylene mesh straps or positioning pocket.

Warnings (cont.)

10. **The use of any permanent mesh or patch in a contaminated or infected wound could lead to fistula formation and/or extrusion of the prosthesis.**

Precautions

1. Please read all instructions prior to use.

2. For ventral hernia applications, **Davol*** permanent or absorbable fixation or nonabsorbable monofilament sutures are recommended to properly secure the prosthesis. If absorbable fixation devices are used, they must be indicated for use in hernia repair. Absorbable sutures may be used for inguinal hernia repair.

3. Only physicians qualified in the appropriate surgical techniques should use this prosthesis.

Notes

Notes

Notes

Catalog Number	Quantity	Size	Description	
0115808	2/cs.	7.5cm (3") diameter	Small Circle	❑
0115810	2/cs.	10cm (4") diameter	Medium Circle	❑
0115812	2/cs.	11.5cm (4.5") diameter	Large Circle	❑
0115814	2/cs.	8cm x 12cm (3" x 4.5")	Small Oval	❑
0115816	2/cs.	9.5cm x 13cm (3.5" x 5")	Medium Oval	❑

*Each Bard® **MK**®† Patch with Posiflex® Memory Technology comes with an optional pre-shaped onlay patch measuring 6cm x 13.7cm (2.4" x 5.4").*

❑ **Please add the Bard® MK®† Patch to my preference card.**
❑ **I would like to have the Bard® MK®† Patch in stock.**

Surgeon's Signature _____

Purchase Order Number _____

Catalog Number _____

Date _____ **Quantity** _____

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The technique presented herein is for informational purposes only. The decision of which technique to use in a surgical application lies with the surgeon based on patient profile and previous surgical experience.

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Consult product labels and inserts for any indications, contraindications, hazards, warnings, cautions and instructions for use.

[1]Kugel, R., Minimally Invasive Repair of Groin and Ventral Hernias Using a Self-Expanding Mesh Patch. Surgical Technology International X, 2002, pp. 81-87.
[2]Millikan, KW et al, A Prospective Study of the Mesh-Plug Hernioplasty. The American Surgeon, March 2001, pp. 285-289.
[3]Robbins, AW, Rutkow, IM, Open Mesh Plug Hernioplasty: The Less Invasive Procedure. Surgical Technology International V, Universal Medical Press, Inc., 1996, pp. 87-91.

† Bard® Modified Kugel® Patch

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