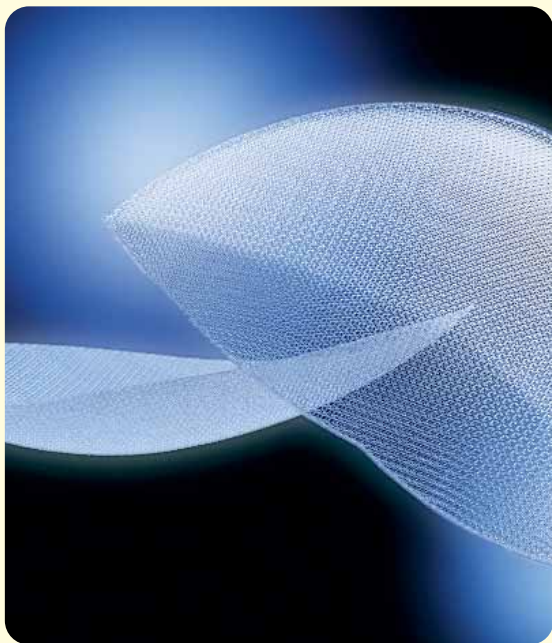


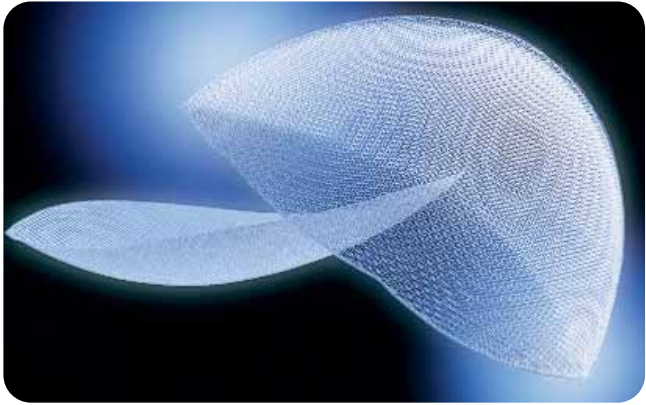
# Bard® 3DMax® Mesh Technique Guide

Adding a new dimension  
to laparoscopic hernia repair



*Utilizing the Bard® 3DMax® Mesh*





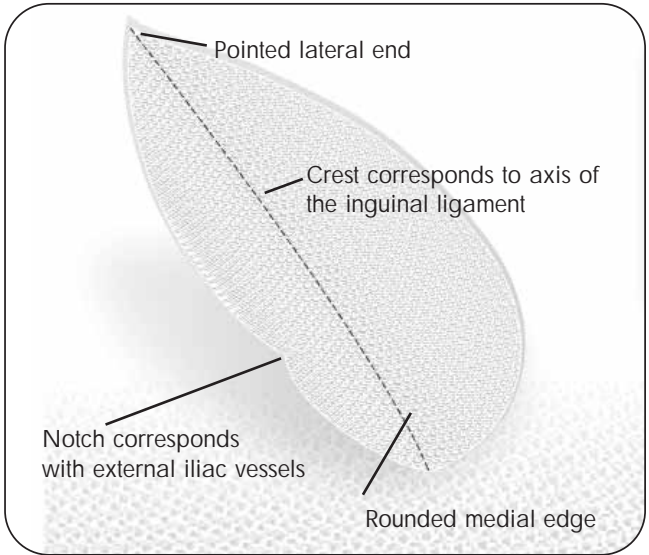
The Bard® 3DMax® mesh is the first three-dimensional, anatomically formed prosthesis for use in laparoscopic groin hernia repair.

*Bard 3DMax* mesh has been designed based on careful and precise anatomical research of the inguinal anatomy. The result is a truly unique prosthesis for laparoscopic hernia surgery.

The technique presented herein is for informational purposes only and the decision of which technique to use in a particular surgical application should be made by the surgeon based on the individual facts and circumstances of the patient and previous surgical experience.

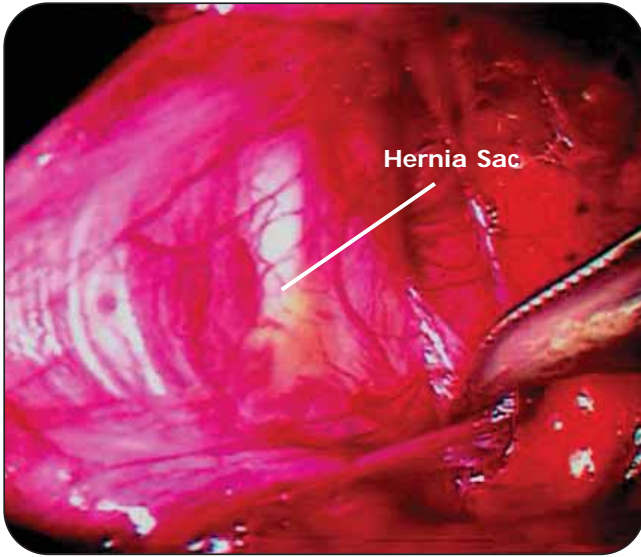
### **Benefits of Bard® 3DMax® Mesh:**

- Pre-formed to fit the inguinal anatomy
- 3-Dimensional shape and reinforced edge enhance the speed and simplicity of the placement<sup>1</sup> thus saving time during the case
- Easier to place than traditional flat mesh
- No need to trim the mesh
- Techniques that do not require fixation may reduce the chance of post-operative neuralgia<sup>2</sup> or the additional surgical costs associated with fixation



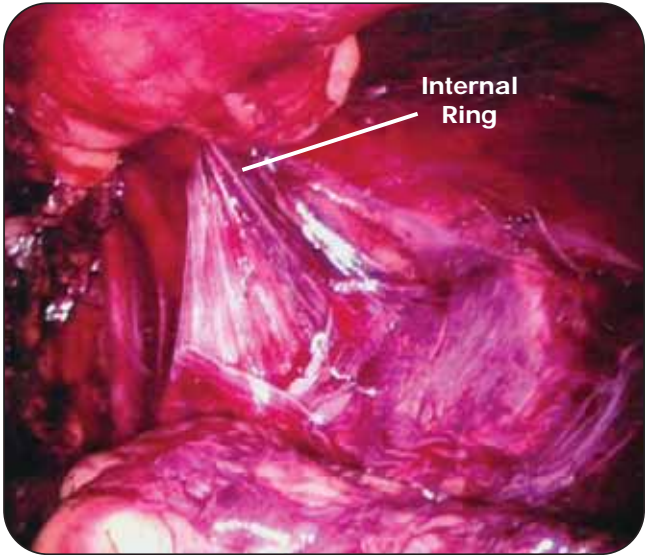
### Standard Procedure

- Dissect out and reduce hernia sac.
- Complete proper dissection.
- Roll Bard® 3DMax® mesh around the grasper and deploy mesh.
- Line up the points of the *Bard 3DMax* mesh with the inguinal anatomy.
- Turn off the insufflator and slowly deflate through the trocar.



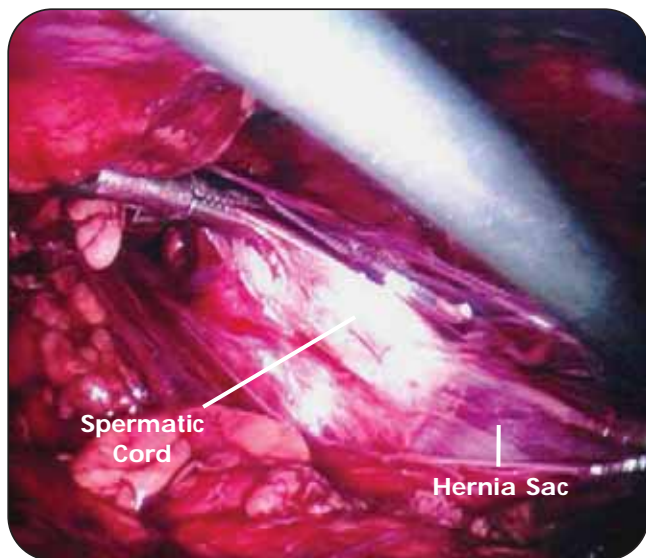
**1a. Inguinal Anatomy  
(Right inguinal hernia - TEP approach)**

- Identify hernia sac.



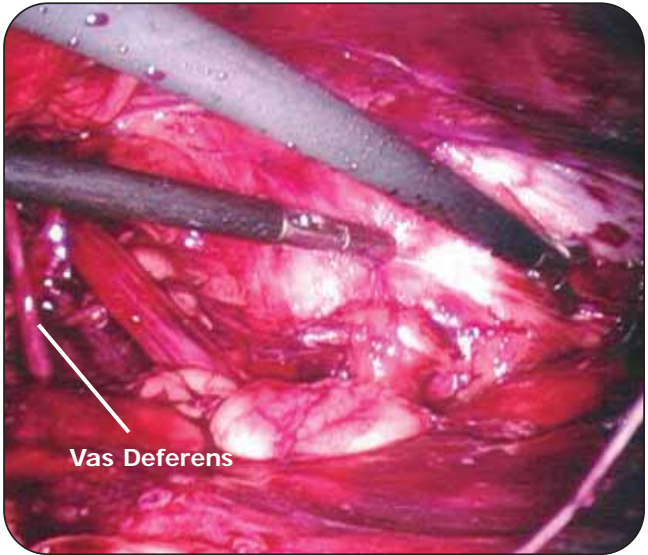
**1b.** Inguinal Anatomy  
(Right inguinal hernia - TEP approach)

- Dissect hernia sac out of defect.



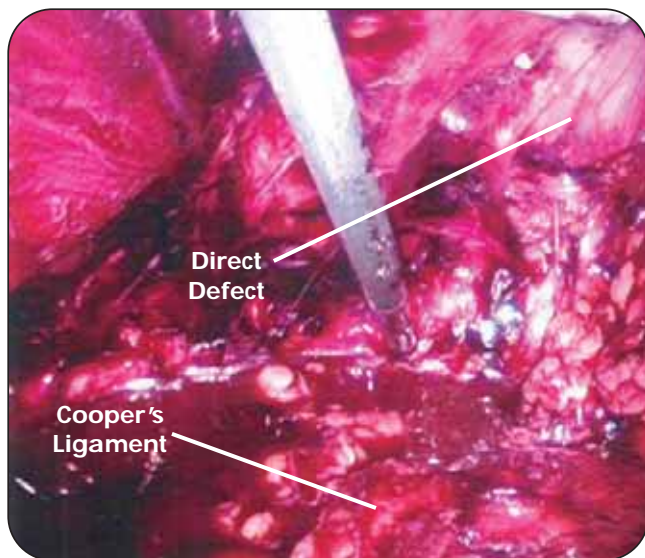
**1c. Inguinal Anatomy  
(Right inguinal hernia - TEP approach)**

- Dissect hernia sac off of the spermatic cord structures.



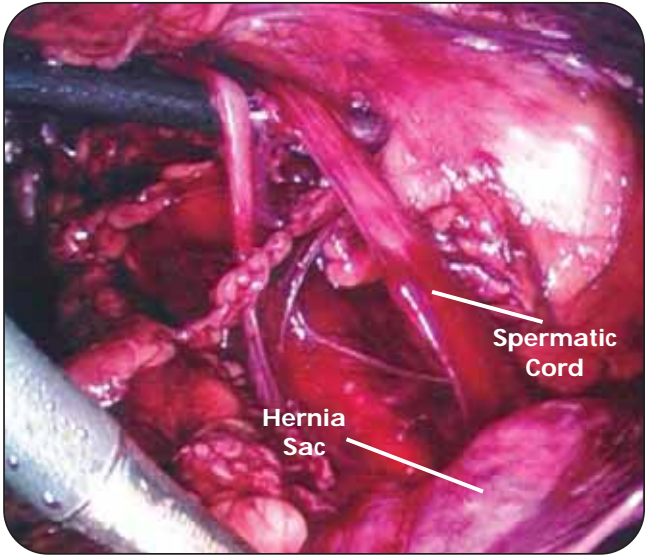
**2a. Proper Dissection  
(Right inguinal hernia - TEP approach)**

- Dissect laterally far enough to accept the pointed lateral tip of the Bard® 3DMax® Mesh.



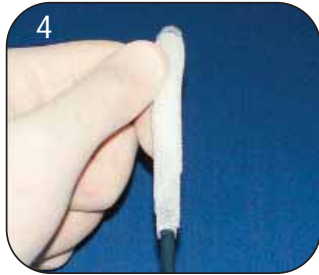
**2b. Proper Dissection  
(Right inguinal hernia - TEP approach)**

- Medially, clean off Cooper's ligament.



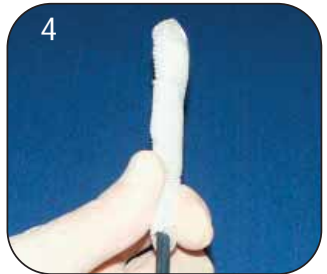
**2c. Proper Dissection  
(Right inguinal hernia - TEP approach)**

- The peritoneum must be dissected off of the cord structures to the point where the vas deferens and cord structures deviate.



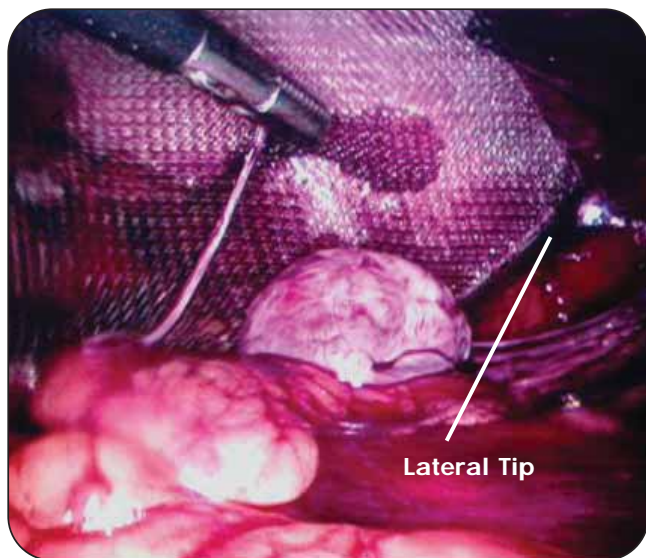
### 3a. Rolling Technique Medium-Size Mesh

- Use the rolling technique demonstrated in steps 1-4 above for the medium sized mesh.



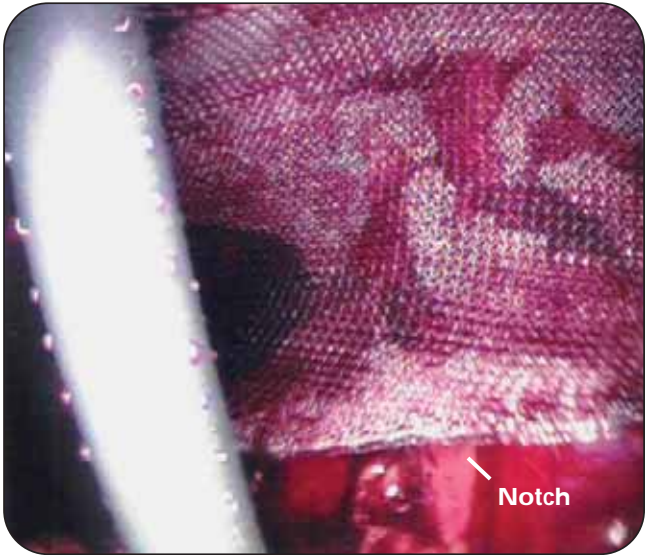
**3b. Rolling Technique  
Large or Extra Large-Size Meshes**

- Follow the rolling technique demonstrated in steps 1-4 above for the large or extra-large meshes.
- If the extra-large size mesh will not easily deploy down the trocar, remove trocar and insert mesh through the incision. Reinsert trocar.



#### 4a. Positioning

- Position the pointed lateral tip of the Bard® 3DMax® mesh.



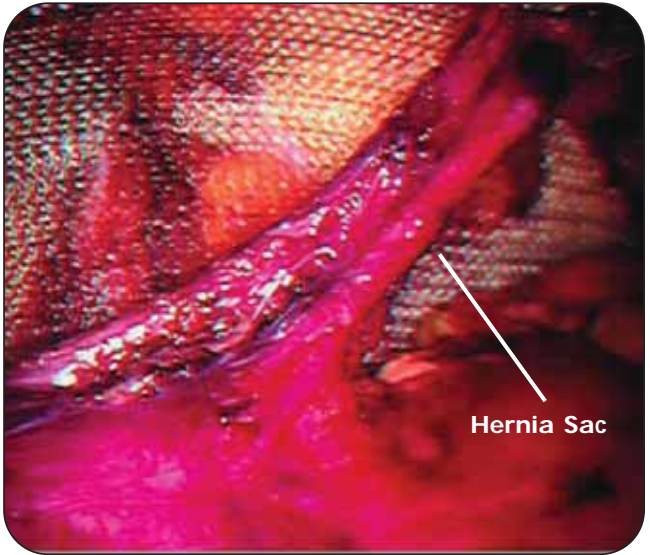
#### **4b.** Positioning

- The notch of the Bard® 3DMax® mesh should be placed over the external iliac vessels.



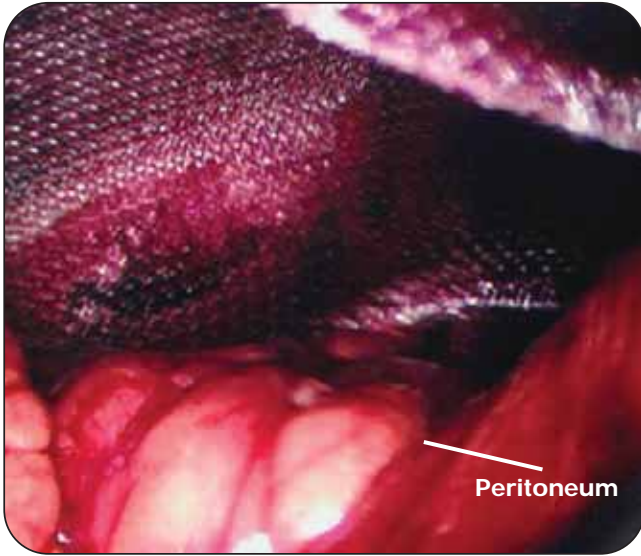
#### 4c. Positioning

- The top edge of the Bard® 3DMax® mesh should be positioned far enough anteriorly to cover the direct space.



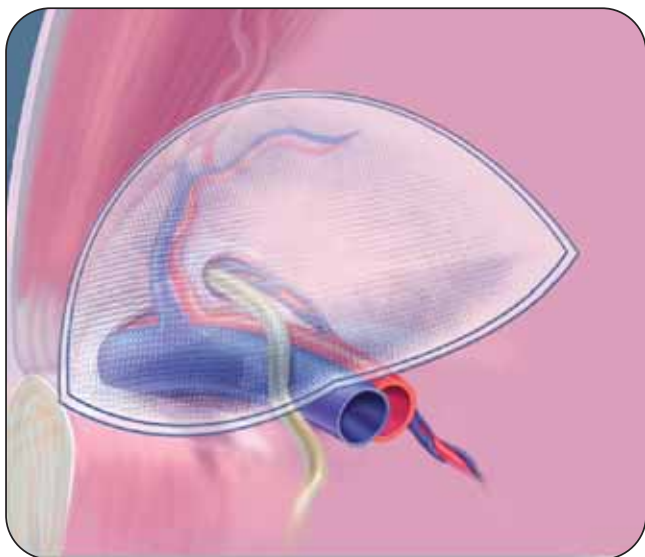
**5a. Turn Off Insufflator**

- Once the mesh is in the proper place, turn off the insufflator and slowly let the air vent out through a trocar.



## 5. Turn Off Insufflator

- Keep the camera in place and watch to ensure the bottom edge of the mesh does not flip up. The peritoneum will roll on top of the mesh. Intra-abdominal pressure will hold the mesh in place as fibroblastic activity takes place.



## 6. Tips for using Bard® 3DMax® Mesh

- It is NOT recommended to cut or alter the mesh.
- It can be helpful to mark one side of the mesh with a **sterile** marker or suture to help during orientation of the product.
- The size of mesh is dictated by the amount of dissection.

## 6. Tips for using Bard® 3DMax® Mesh

- Be sure to thoroughly dissect the peritoneum off of the cord structures.
- Be sure to pull the mesh high enough to completely cover the direct space.
- Some surgeons have placed the Bard® 3DMax® mesh without fixation due to its anatomical shape and memory.
- The decision of which technique to use should be made by the surgeon based on the individual facts and circumstances of the patient and previous surgical experience.

Special appreciation to:  
Dr. Fredrick Wright,  
Alta Bates Medical Center  
Berkeley, CA  
for his contributions to this material

## PRODUCT OFFERING

Catalog No.	Description	Size	Quantity
0115310	Medium Left	3" x 5" (8.5cm x 13.7cm)	1 each
0115311	Large Left	4" x 6" (10.8cm x 16cm)	1 each
0115312	Extra-Large Left	5" x 7" (12.4cm x 17.3cm)	1 each
0115320	Medium Right	3" x 5" (8.5cm x 13.7cm)	1 each
0115321	Large Right	4" x 6" (10.8cm x 16cm)	1 each
0115322	Extra-Large Right	5" x 7" (12.4cm x 17.3cm)	1 each



**BARD**

**Davol Inc.**  
**Subsidiary of C.R. Bard, Inc.**  
**P.O. Box 8500**  
**Cranston, RI 02920**  
**1.800.556.6275**  
**[www.davol.com](http://www.davol.com)**

<sup>1</sup>Bell, RCW, Price, JG. Laparoscopic Inguinal Hernia Repair Using an Anatomically Contoured Three - Dimensional Mesh. Surgical Endoscopy. 2003;17:1784-1788.

<sup>2</sup>Pajotin, Ph. Laparoscopic groin hernia repair using a curved prosthesis without fixation. A report on 500 cases. Le Journal de Celio-Chirurgie - 1998; 28:64.

Davol, Bard and 3DMax are registered trademarks of C.R. Bard, Inc. or an affiliate.

**Please consult product labels for indications, contraindications, hazards, warnings, precautions, and instructions for use.**

Copyright © 2004 C.R. Bard, Inc. Murray Hill, NJ.  
 All Rights reserved.  
 MM3DTG2