

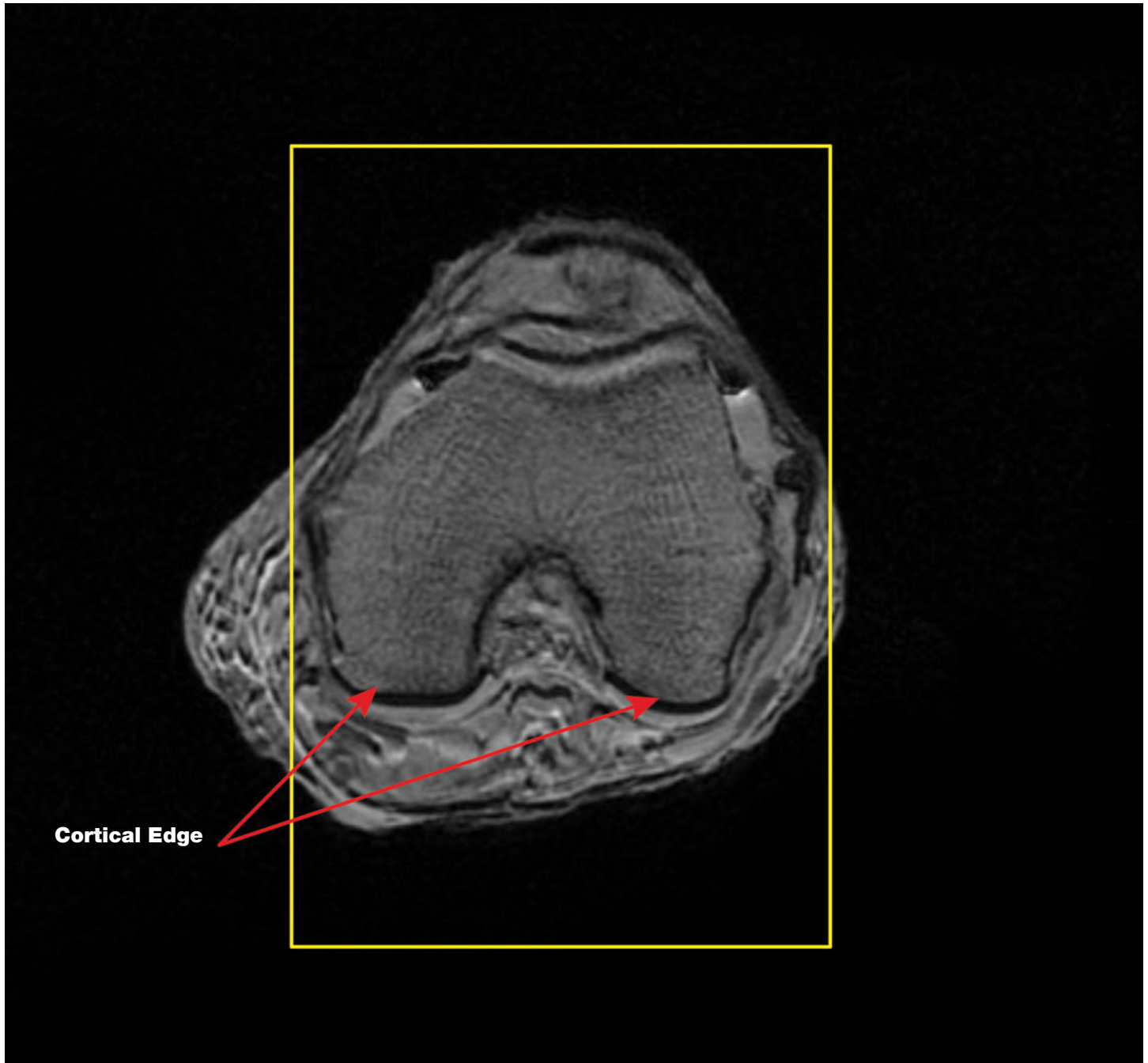
# OtisMed® Imaging Technique: **Graphix for Knee MRI**

PHILIPS, SIEMENS, &  
TOSHIBA GRAPHIX  
MRI SCANNERS



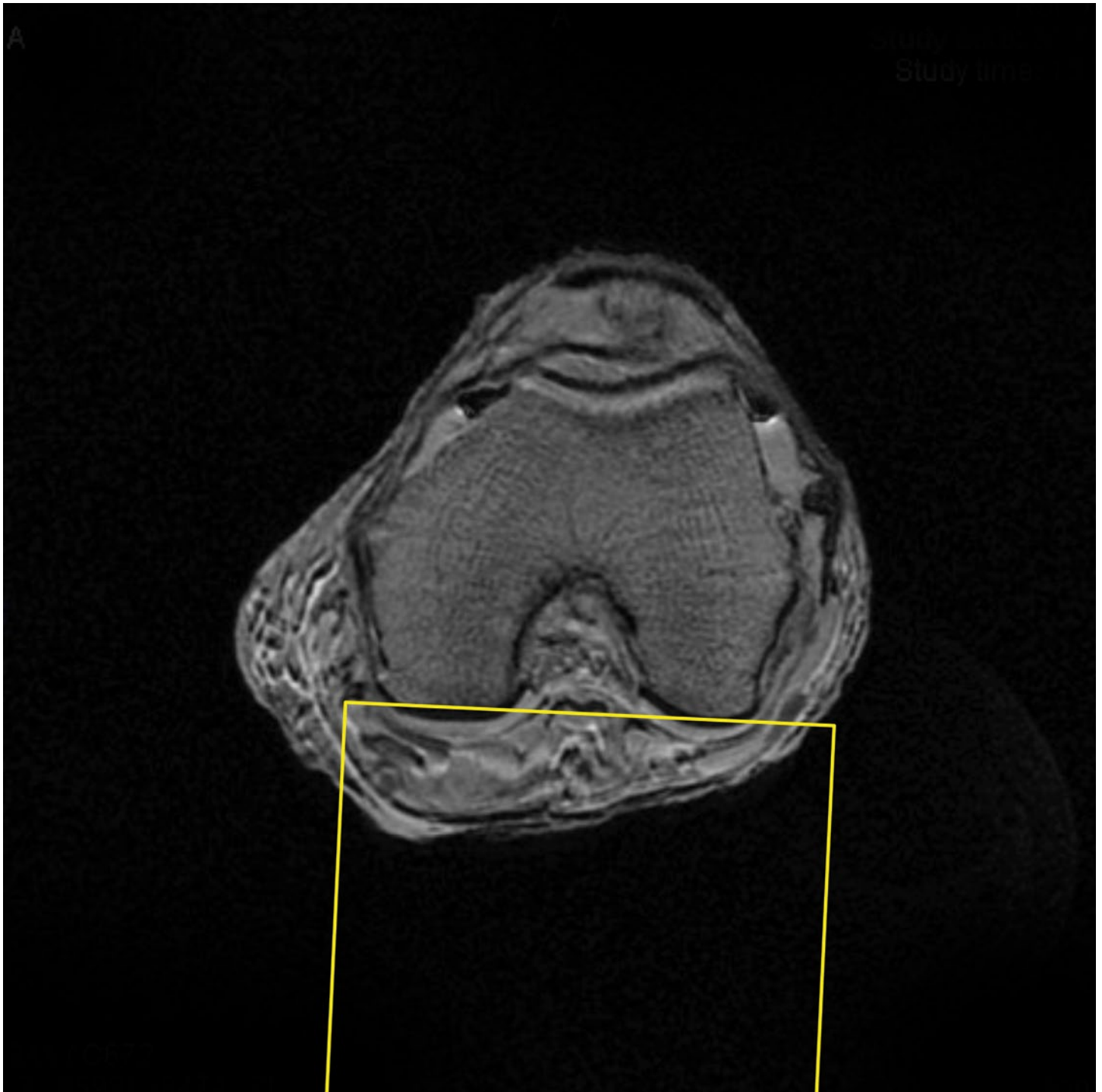
**Positioning for Posterior Alignment**

- Use your “box” shaped graphix.
- Follow the steps below for proper placement of slices. See Figures 1, 2, and 3.
- You may need to use more than one slice to obtain the alignment necessary to pass QC (Quality Check) specifications.



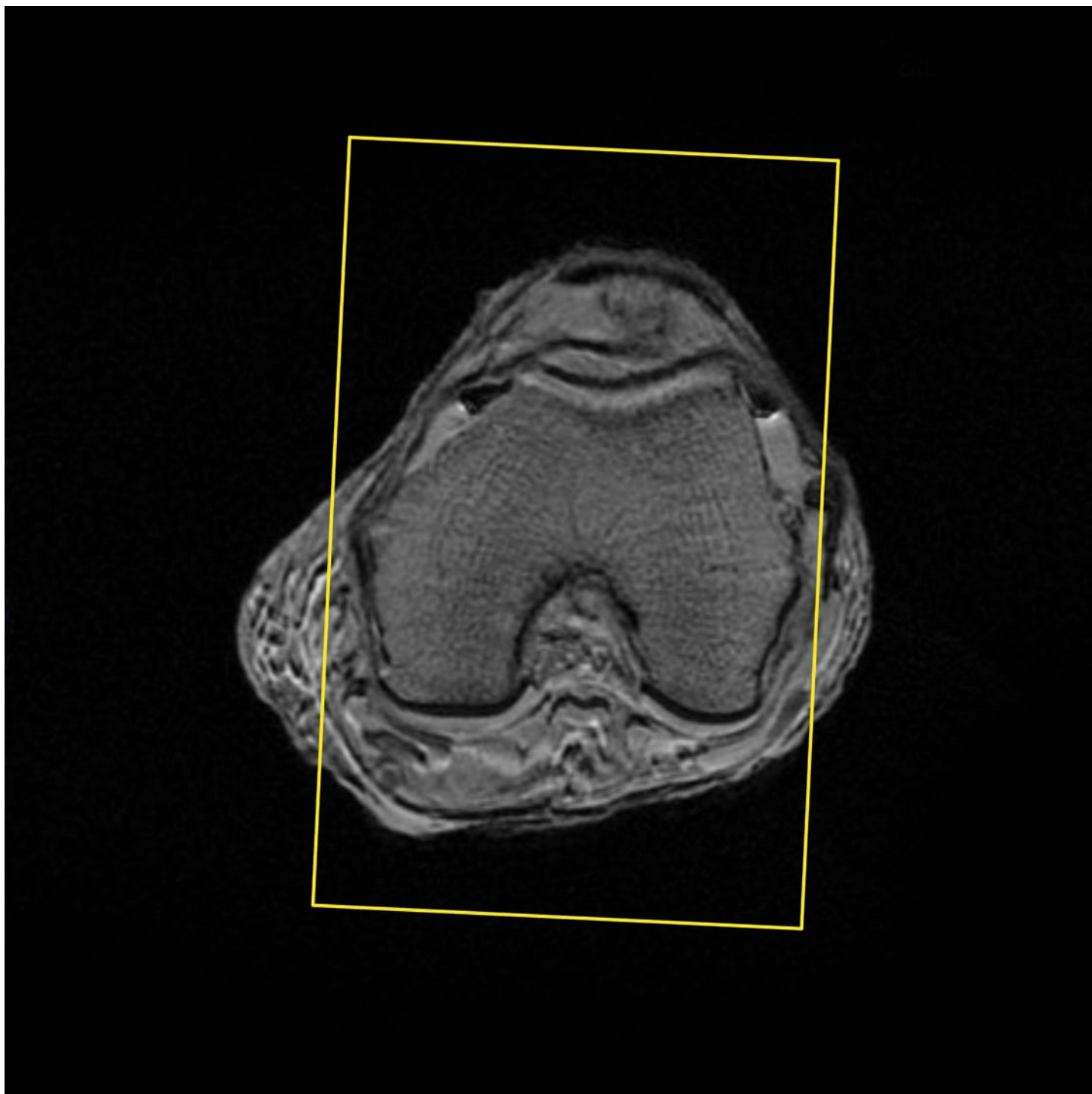
*Figure 1*  
*Axial image showing the Cortical Cancellous edges of the posterior condyles.*

## Graphix for Knee MRI



*Figure 2*

- Place line or edge of FOV line at cortical edge.
- Toggle between images both superiorly and inferiorly making sure the cortical edges do not fall BELOW the yellow line as shown here. If they do, make slight angle adjustment and re-check.



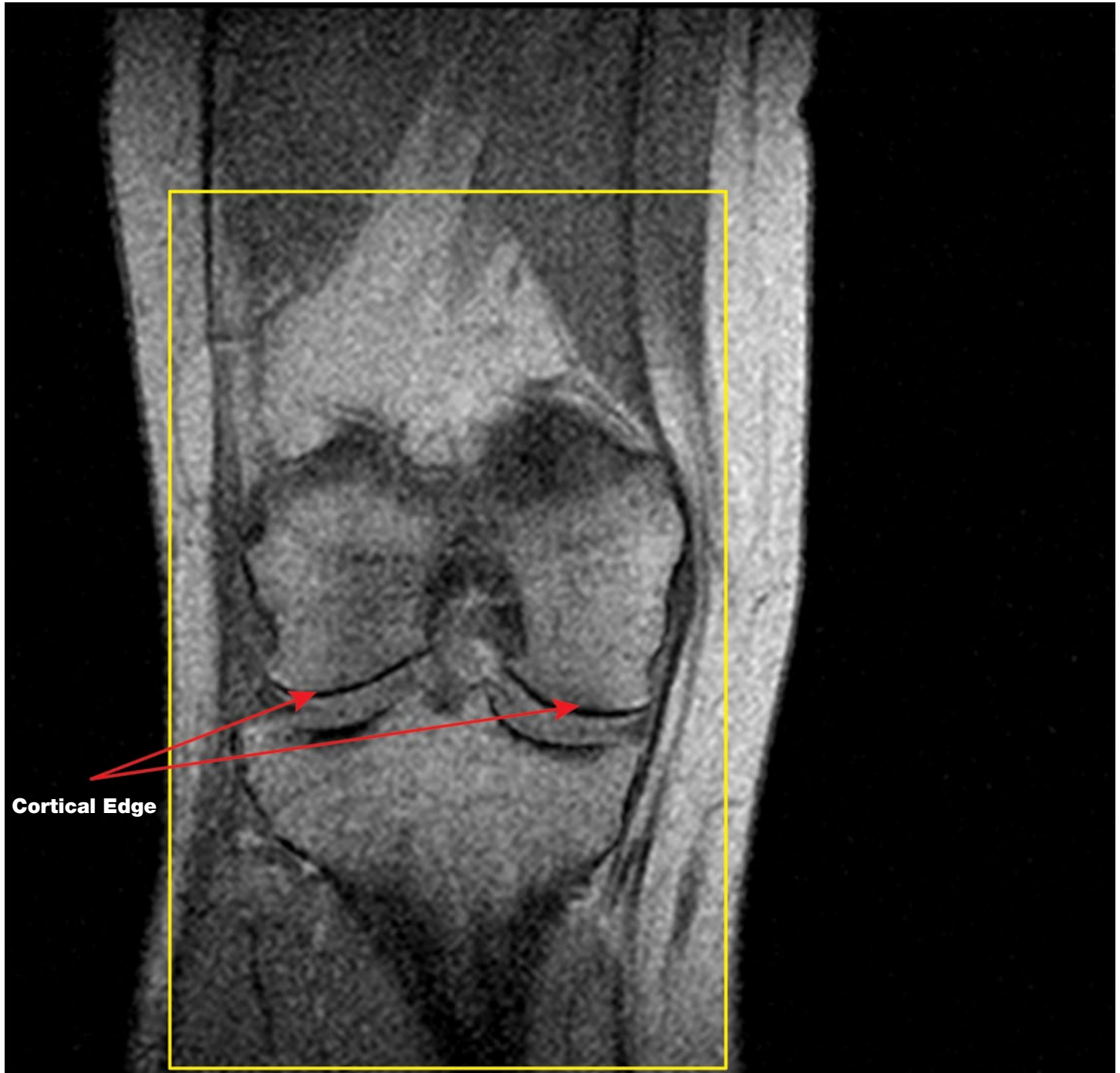
*Figure 3*  
*Center the rectangle FOV over the knee.*



## Graphix for Knee MRI

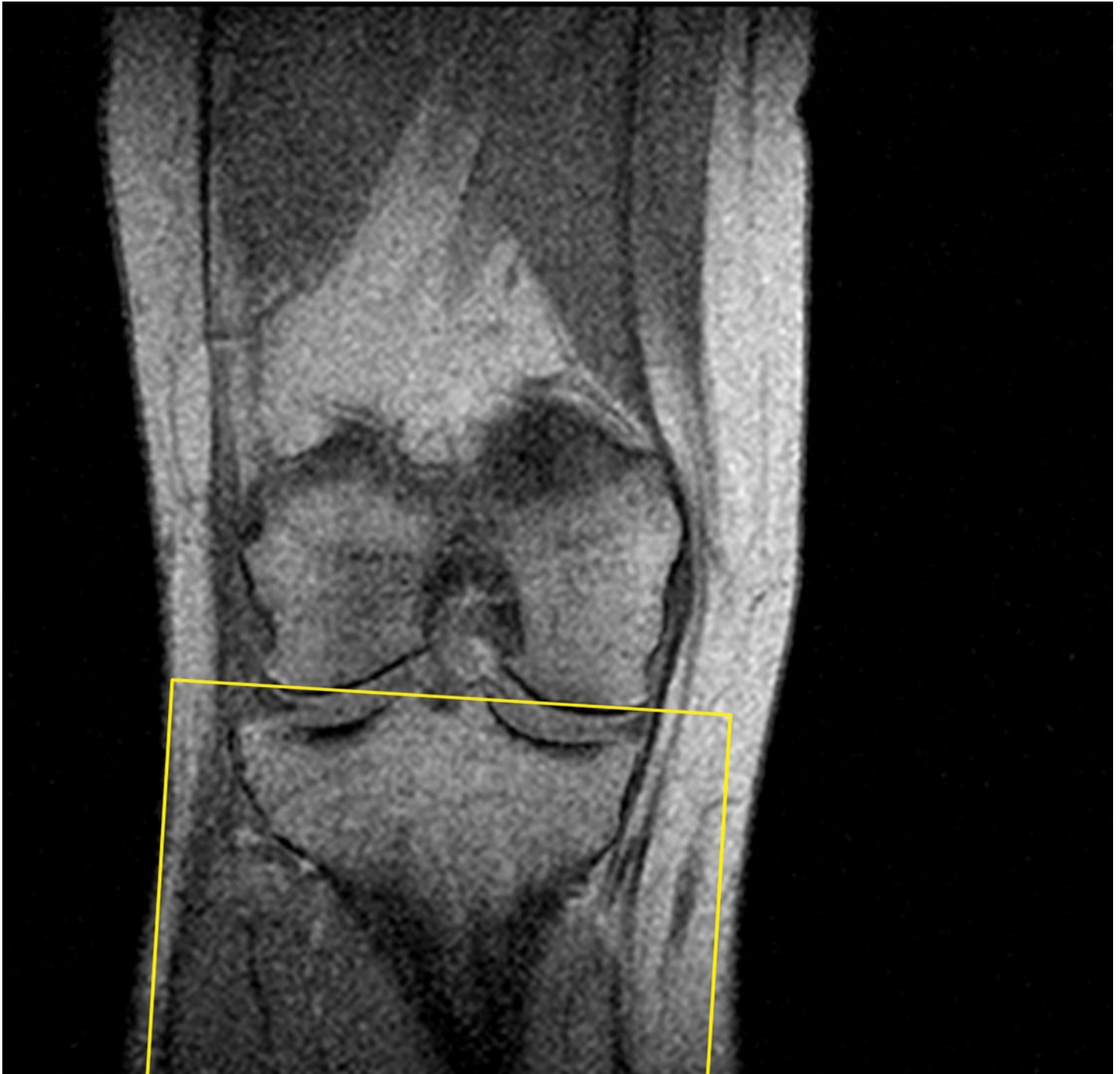
### Positioning for Inferior Alignment

- Use your “box” shaped graphix.
- Follow the steps below for proper placement of slices. See Figures 4, 5, and 6.
- You may need to use more than one slice to obtain alignment necessary to pass QC (Quality Check) specifications.



**Cortical Edge**

*Figure 4*  
Sample Coronal image showing the Cortical Cancellous edges of the condyles.



*Figure 5*

- Place line or edge of FOV at the inferior cortical edge.
- Toggle anteriorly and posteriorly to make sure the cortical edges do not fall BELOW the yellow line. If they do, make slight angle adjustment and re-check.

## Graphix for Knee MRI

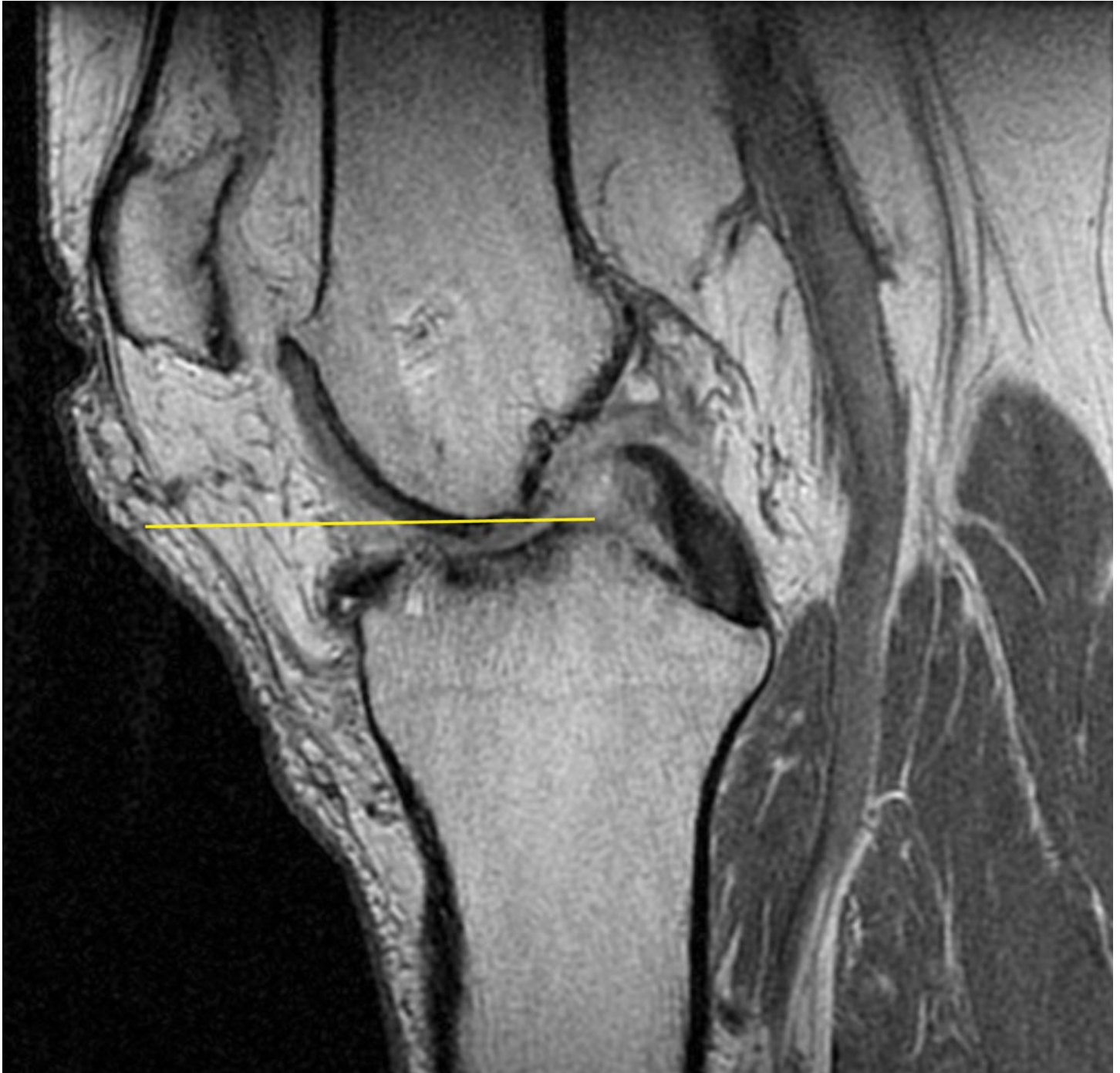


*Figure 6*

- Move box to center slices over knee.
- Make sure to include all of the head of the fibula.

**Centering 160mm FOV**

- When viewing the Sagittal locator, center the FOV slightly below the “point” of the femur when viewing a mid-slice Sagittal image. See Figure 7.
- Center 160mm FOV as shown when viewing a Coronal image. See Figure 8.



*Figure 7  
Sample image showing correct centering at level of yellow line.*



**Graphix for Knee MRI**



*Figure 8*  
Sample image showing centering point on coronal image.

**Alignment for the T1 Sagittal Body Coil Knee Scan**

- Choose a coronal knee locator image showing the inferior condyles to be most prominent.
- Place “box” graphix so that the Sagittal slices will be perpendicular to the inferior condyles, see Figure 9.
- Plot slices so that all of the femoral condyle is covered. Do not cut off any bony anatomy.

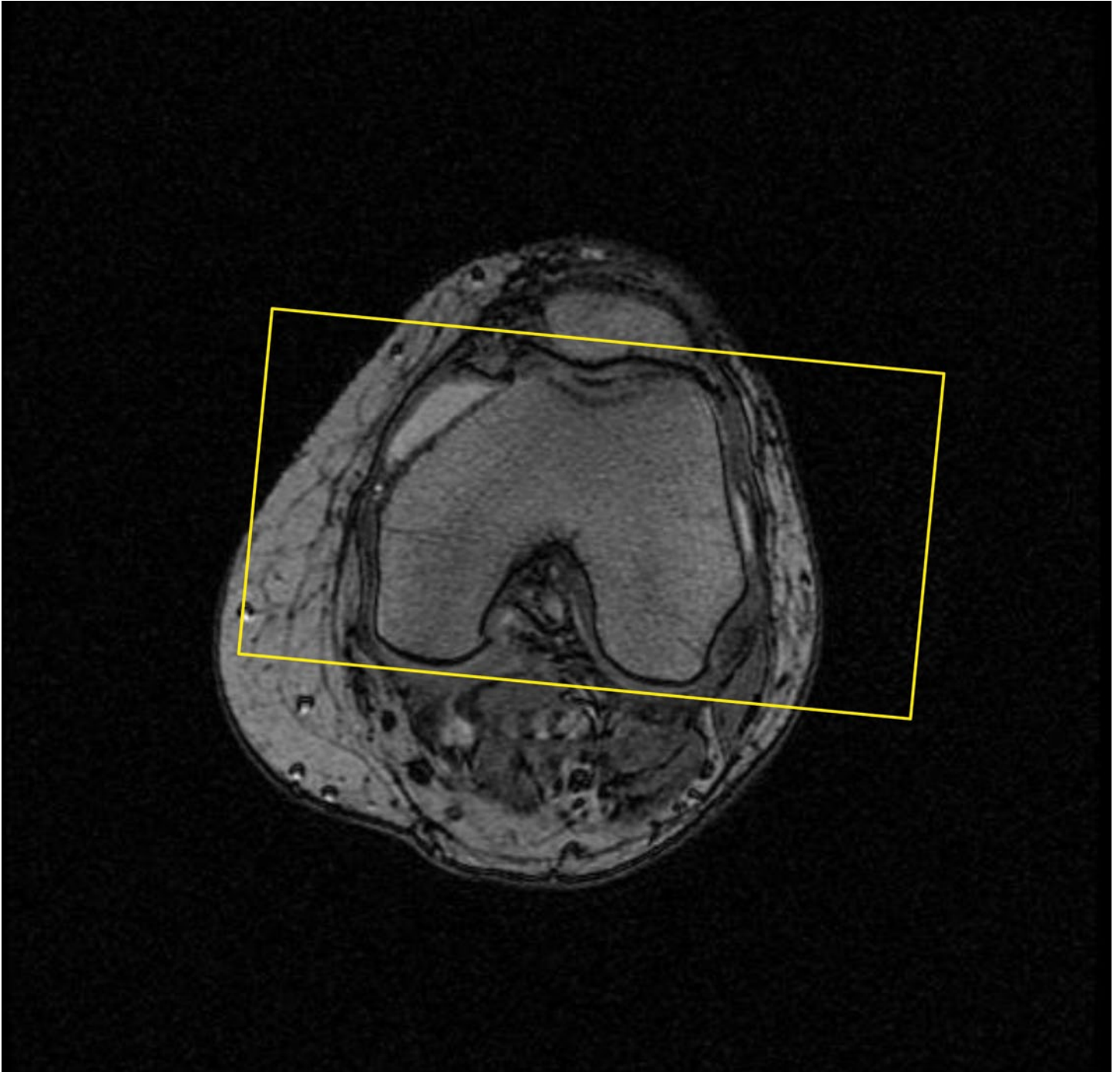


*Figure 9  
Sagittal slice placement.*

## Graphix for Knee MRI

### Alignment for the T1 Coronal Body Coil Knee Scan

- Using the Axial locator image, find the image showing the posterior condyles to be most prominent.
- Place “box” graphix so that the slices will be parallel to the posterior condyles. See Figure 10.
- Plot slices so that all of the condyle is covered from Anterior to Posterior.

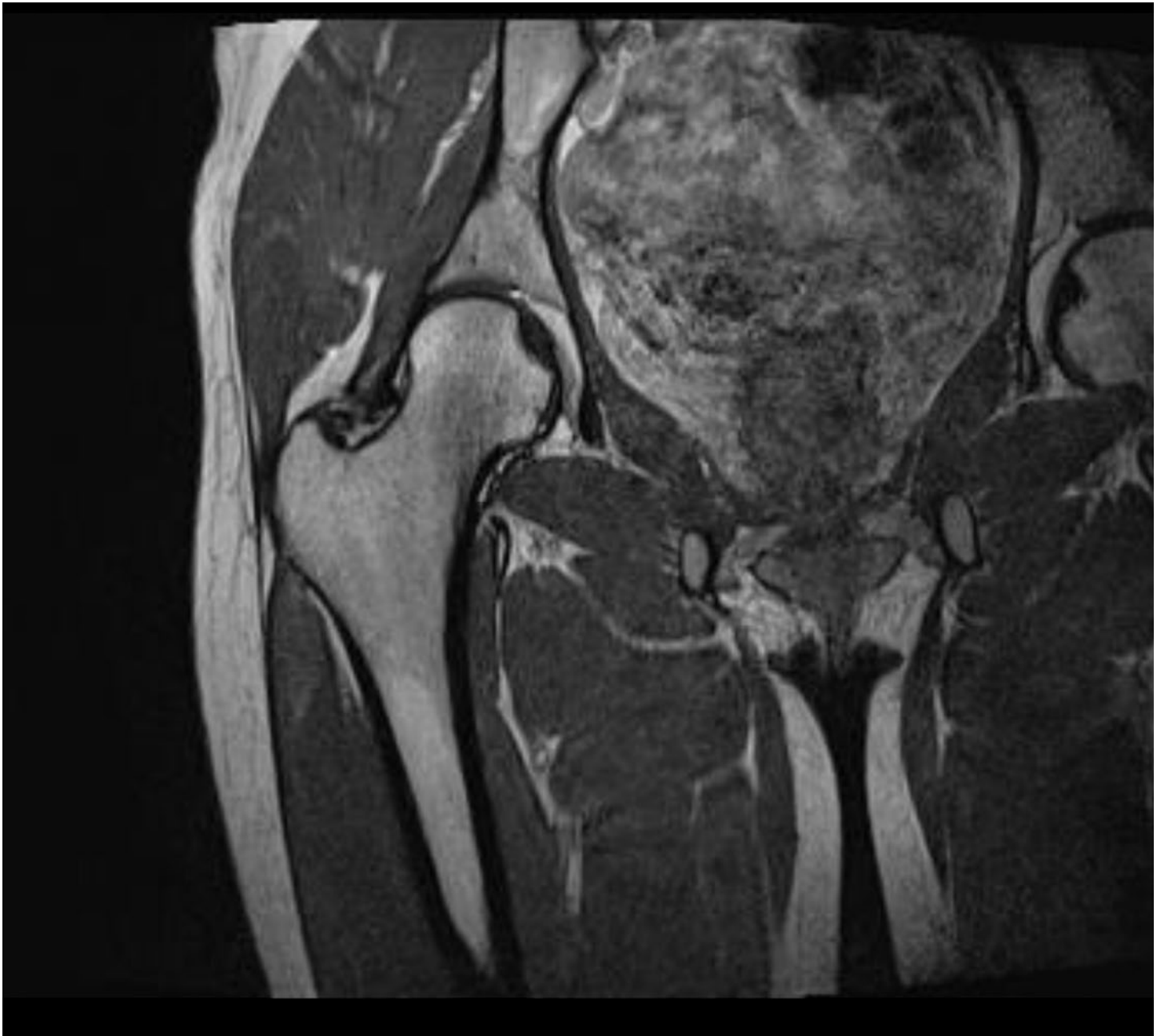


*Figure 10*  
*Coronal Placement.*

**Body Coil Images for the Hip and Ankle**

- Make sure the Hip images show:
  - Head of the Femur
  - Greater Trochanter
  - Femoral Neck

See Figure 11.



*Figure 11  
Sample Hip Image.*



## Graphix for Knee MRI

- Make sure the Ankle images show the ankle joint line. See Figure 12.



*Figure 12*  
*Sample Ankle Scan.*

---

**Joint Replacements**

---

**Trauma, Extremities & Deformities**

---

**Craniomaxillofacial**

---

**Spine**

---

**Biologics**

---

**Surgical Products**

---

**Neuro & ENT**

---

**Interventional Spine**

---

**Navigation**

---

**Endoscopy**

---

**Communications**

---

**Imaging**

---

**Patient Care & Handling Equipment**

---

**EMS Equipment**

325 Corporate Drive  
Mahwah, NJ 07430  
t: 201 831 5000

[www.stryker.com](http://www.stryker.com)

Registration with, and use of, the OtisMed ShapeMatch services by institutions/persons located in the EEA requires that the institutions/persons be registered as being authorized to transfer patient personal and sensitive personal information to the US. By registering with, and using, this service, you represent and warrant that you are in compliance with the data protection laws of your country of residence or registration.

An imaging technologist must always rely on his or her own professional clinical judgment when deciding whether to use a particular CT or MRI scanner on a particular patient. Stryker does not dispense medical advice and expects that imaging technologists are trained in the use of any particular CT or MRI scanner before using it on a particular patient. An imaging technologist must be certified and/or licensed by the appropriate jurisdiction, and/or otherwise qualified to use a CT or MRI scanner, in order to obtain images used to manufacture an OtisMed cutting guide for on a particular patient.

The information presented is intended to demonstrate the breadth of Stryker product offerings. A surgeon must always refer to the package insert, product label and/or instructions for use before using any Stryker product. Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your Stryker representative if you have questions about the availability of Stryker products in your area.

Stryker Corporation or its divisions or other corporate affiliated entities own, use or have applied for the following trademarks or service marks: Innovation in Motion, OtisMed, Stryker. All other trademarks are trademarks of their respective owners or holders.

Literature Number: NL10-BR-OM-2784 Rev. 1  
02/11

Copyright © 2011 Stryker  
Printed in USA