Introduction to the Male Pelvis



Learning Objective

After completing this exercise, you will be able to name the major organs of the male pelvis and the muscles forming the pelvic floor.

Click on a structure to highlight,

click again to dissect

Use the reference on the left to locate controls and areas referred to in the text below.

Start by setting the cross section through the area we want to explore:

- Drag the reference plane in the dissection area by its green border to the middle of the pelvis (the cross sections are numbered in the lower left corner, you should be close to 1890)
- Explore the anatomy of the pelvis by moving your mouse over the cross section (structures are identified in the upper right corner of the cross section area)

Now skin the cadaver to reveal the anatomy below:

- Click on the skin in the dissection area to highlight it (structures change colors when highlighted)
- · Click on the skin again to remove it (now you see the fat and other subcutaneous tissue)
- Remove the fat just like the skin

3 Take a closer look by centering the pelvis in the dissection area:

- Zoom in using the magnification slider **(**)
- Drag the dissection with your mouse to reposition it
- Select the "Regions" tab
- Select the "Upper Limb" from the list
- Click the "Remove" button

Identify the organs of the pelvis by highlighting them:

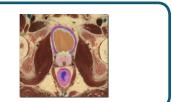
- Select the "Index" tab **2**
- Enter "Bladder" into the search box
- Select the "Urinary bladder" from the list
- Click the "Add & Highlight" button

Name the other two major organs within the male pelvis:

2.

Locate specific structures with the index





Isolate the muscles of the pelvic floor by simplifying the dissection:

- Click the "Clear" button to empty the dissection area 3
- Select the "Systems" tab **2**
- Select "Skeletal system" and click the "Add" button
- Using the "Regions" tab 2, remove the "Upper Limb" and "Lower Limb" as before
- · Also using "Regions" expand the "Abdomen and Pelvis" using the icon to the left of it
- Expand the "Muscles"
- Select the "Pelvic Diaphragm and click "Add and Highlight"









Name the two muscles of the pelvic diaphragm?

(*Hint: You can find these from the dissection or the regions tab.*)

2.____

Construct the other muscles of the pelvic floor:

- Rotate the dissection to 45° using the rotation wheel 😏 or the command (Mac) or ctrl (PC) key while pressing the left or right arrow keys to move 5° at a time
- Right-click on the right "Osseous part of the Hip bone" and select "Dissect", do the same for the right "Cartilage of the Acetabulum"
- Using the "Index", add and highlight the left "Piriformis" and "Obturator internus" muscles
- Also, add and highlight the "Sacrotuberous ligament"

(These muscles and ligaments form the muscular floor or the pelvic cavity)

Rotate the dissection using the left or right arrow key while holding the command (Mac) or ctrl (PC)

Visualize a more advanced anatomical concept, the Urogenital Tract:

- Click the "Clear" button to clear the dissection area 3
- In the "Systems" tab, expand the "Skeletal system" and add the "Vertebral column"
- Expand the "Bones of the Lower limb" and add the "Pelvic girdle"
- Also from the "Systems" tab, add and highlight the "Urinary" and "Genital" systems
- · Go to the "Action" menu, select "Fit Dissection to Window" and choose "Highlighted"
- Right-click on the left "Ureter" just as it enters the pelvis and choose "Cross Section"
- Zoom in on the cross section by using the magnification slider 4
- Follow the ureter inferiorly to the bladder by holding down the command (Mac) or ctrl (PC) key while pressing the down arrow key to move 1mm at a time through the cross sections

Move the cross section 1mm at a time by holding the command (Mac) or ctrl (PC) key while pressing the up or down arrow keys

Which major reproductive structure passes medially to the Ureter?

- Follow this structure inferiorly until it passes the "Seminal vesicle" and enters the "Prostate gland"
- Click the "Clear" button to clear the dissection area 3
- In the cross section, locate the left "Seminal vesicle" and click on it to highlight
- Holding down the shift button, click to highlight the right "Seminal vesicle"
- Again, holding shift, highlight the "Prostate gland" (The seminal vesicles join with the ductus deferents to form the ejaculatory duct within the prostate)
- · Locate the "Ejaculatory duct" within the "Prostate gland"
- Follow this structure inferiorly

Highlight multiple structures or un-highlight a single structure by holding the shift key when clicking

What structure combines with the ejaculatory duct within the prostate gland?

(Clinical Tip: The fact that this structure passes through the prostate, is the reason for symptoms associated with prostate enlargement in older males)







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