

# ORTHOPEDIC SURGERY

Orthopedic surgeons specialize in musculoskeletal and joint issues. They are commonly performing arthroplasty (repair or replacement of a joint), addressing sports injuries and treating disorders of the spine.

## Types of Orthopedic Procedures:

- 1| Total Knee Replacement/Arthroplasty (TKR/A)
- 2| Total Hip Replacement/Arthroplasty (THR/A)
- 3| Spine Procedure - Scoliosis





## Total Knee Replacement/Arthroplasty

A surgical procedure in which damaged parts of the knee joint are replaced with artificial parts.

### CAPSULE

Material	Item Code	USP	Length (cm)	Colour	Needle					
PDO	RA-1065Q	2	36 x 36	Violet	½ Circle	Taper Point	48 mm	CTX	Bi-directional	
PDO	RA-2065Q	2	45 x 45	Violet	½ Circle	Taper Point	48 mm	CTX	Bi-directional	
PDO	RX-1066Q	2	36 x 36	Violet	½ Circle	Reverse Cutting	40 mm	CP	Bi-directional	
PDO	RX-2066Q	2	45 x 45	Violet	½ Circle	Reverse Cutting	40 mm	CP	Bi-directional	
PDO	VLP-2010	2	70	Violet	½ Circle	Taper Point	48 mm	CTX	Uni-directional	

### SUBCUTANEOUS

Material	Item Code	USP	Length (cm)	Colour	Needle					
PDO	VLP-2012	0	70	Violet	½ Circle	Taper Point	36 mm	CT-1	Uni-directional	
PDO	RA-1067Q	0	36 x 36	Violet	½ Circle	Taper Point	36 mm	CT-1	Bi-directional	
PDO	RA-2065Q	2	45 x 45	Violet	½ Circle	Taper Point	48 mm	CTX	Bi-directional	
PDO	RX-2069Q	0	36 x 36	Violet	½ Circle	Reverse Cutting	36 mm	CP-1	Bi-directional	
PDO	RX-2068Q	0	45 x 45	Violet	½ Circle	Reverse Cutting	36 mm	CP-1	Bi-directional	
Monoderm™	YA-2036Q	0	36 x 36	Undyed	½ Circle	Reverse Cutting	36 mm	CP-1	Bi-directional	
Monoderm™	YA-2035Q	0	45 x 45	Undyed	½ Circle	Reverse Cutting	36 mm	CP-1	Bi-directional	
Monoderm™	YA-1029Q	0	36 x 36	Undyed	½ Circle	Taper Point	36 mm	CT-1	Bi-directional	

### SUBCUTICULAR

Material	Item Code	USP	Length (cm)	Colour	Needle					
Monoderm™	VLM-2012	2-0	45	Undyed	¾ Circle	Precision Reverse Cutting	24 mm	PS-1	Uni-directional	
Monoderm™	YA-2024Q	2-0	30 x 30	Undyed	¾ Circle	Precision Reverse Cutting	24 mm	PS-1	Bi-directional	
Monoderm™	YA-2023Q	3-0	30 x 30	Undyed	¾ Circle	Precision Reverse Cutting	24 mm	PS-1	Bi-directional	
Monoderm™	YA-2022Q	2-0	30 x 30	Undyed	¾ Circle	Precision Reverse Cutting	19 mm	PS-2	Bi-directional	
Monoderm™	YA-2021Q	3-0	30 x 30	Undyed	¾ Circle	Precision Reverse Cutting	19 mm	PS-2	Bi-directional	



## Procedure: Total Knee Arthroplasty



SCAN TO SEE VIDEO

### STEPS

- 1** ▶ Incision made on the front of knee, cutting through the tissue surrounding the muscles and bone.
- 2** ▶ The patella is rotated to the outside of the knee to help in visualization.
- 3** ▶ Prepare the femur by cutting it into a shape that matches the corresponding surface of the metal femoral component.
- 4** ▶ Implant the femoral component on the end of the femur.
- 5** ▶ The tibia (shin bone) is prepared with a flat cut on the top; the exposed end of the bone is sized to fit the metal and plastic tibial components.
- 6** ▶ The metal tibial component is inserted into the bone.
- 7** ▶ If needed, the patella is also cut flat and fitted with a plastic patellar component.
- 8** ▶ Surgeon tests components for patient balance and motion.
- 9** ▶ Quill® barbed suture is used in all three layers of wound closure - capsule, subcutaneous, and subcuticular layers.





## ▶ Total Hip Replacement/Arthroplasty

*Surgical reconstruction of the hip in which the ball-and-socket joint is replaced with a prosthesis.*

### CAPSULE

Material	Item Code	USP	Length (cm)	Colour		Needle	SKU			
PDO	RA-1065Q	2	36 x 36	Violet	½ Circle	Taper Point	48 mm	CTX	Bi-directional	
PDO	RX-1066Q	2	36 x 36	Violet	½ Circle	Reverse Cutting	40 mm	CP	Bi-directional	
PDO	RX-1062Q	2	36 x 36	Violet	½ Circle	Reverse Cutting	36 mm	CT-1	Bi-directional	
PDO	RA-2065Q	2	45 x 45	Violet	½ Circle	Taper Point	48 mm	CTX	Bi-directional	
PDO	VLP-2010	2	70	Violet	½ Circle	Taper Point	48 mm	CTX	Uni-directional	

### SUBCUTANEOUS

Material	Item Code	USP	Length (cm)	Colour		Needle				
PDO	VLP-2012	0	70	Violet	½ Circle	Taper Point	36 mm	CT-1	Uni-directional	
PDO	RA-1067Q	0	36 x 36	Violet	½ Circle	Taper Point	36 mm	CT-1	Bi-directional	
PDO	RA-2065Q	2	45 x 45	Violet	½ Circle	Taper Point	48 mm	CTX	Bi-directional	
PDO	RX-2069Q	0	36 x 36	Violet	½ Circle	Reverse Cutting	36 mm	CP-1	Bi-directional	
PDO	RX-2068Q	0	45 x 45	Violet	½ Circle	Reverse Cutting	36 mm	CP-1	Bi-directional	
Monoderm™	YA-2036Q	0	36 x 36	Undyed	½ Circle	Reverse Cutting	36 mm	CP-1	Bi-directional	
Monoderm™	YA-2035Q	0	45 x 45	Undyed	½ Circle	Reverse Cutting	36 mm	CP-1	Bi-directional	
Monoderm™	YA-1029Q	0	36 x 36	Undyed	½ Circle	Taper Point	36 mm	CT-1	Bi-directional	

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Material	Item Code	USP	Length (cm)	Colour		Needle	SKU			
Monoderm™	VLM-2012	2-0	45	Undyed	¾ Circle	Precision Reverse Cutting	24 mm	PS-1	Uni-directional	
Monoderm™	YA-2024Q	2-0	30 x 30	Undyed	¾ Circle	Precision Reverse Cutting	24 mm	PS-1	Bi-directional	
Monoderm™	YA-2023Q	3-0	30 x 30	Undyed	¾ Circle	Precision Reverse Cutting	24 mm	PS-1	Bi-directional	
Monoderm™	YA-2022Q	2-0	30 x 30	Undyed	¾ Circle	Precision Reverse Cutting	19 mm	PS-2	Bi-directional	
Monoderm™	YA-2021Q	3-0	30 x 30	Undyed	¾ Circle	Precision Reverse Cutting	19 mm	PS-2	Bi-directional	



## Procedure: Total Hip Arthroplasty



SCAN TO SEE VIDEO

### STEPS

- 1 ▶ Incision made on hip.
- 2 ▶ Damaged cartilage and bone is removed.
- 3 ▶ The bone is cut to remove the damaged femoral head.
- 4 ▶ The acetabulum is repaired with a reamer used to scrape away the damaged cartilage and bone.
- 5 ▶ The implant is inserted:
  - The socket of the pelvis is called the acetabulum, and the part of the hip replacement inserted into the socket is called the acetabular component (also known as the cup).
- 6 ▶ The femoral stem implant is inserted down the hollow center of the femur and held in the bone with or without cement.
- 7 ▶ The ball of the ball-and-socket hip joint can be inserted on top of the femoral stem; a metal ball is tightly fitted onto the top of the stem.
- 8 ▶ The hip replacement can be placed in final position
  - Quill® barbed suture is used in all three layers of wound closure - capsule, subcutaneous, and subcuticular layers.





## Spine Procedure - Scoliosis

*Scoliosis is a correction of a disorder of the spine. It requires lengthy incisions and long closure times.*

### DEEP LAYER

Material	Item Code	USP	Length (cm)	Colour	Needle						
PDO	VLP-2010	2	70	Violet	½ Circle	Taper Point	48 mm	CTX	Uni-directional		⊙
PDO	RA-1065Q	2	36 x 36	Violet	½ Circle	Taper Point	48 mm	CTX	Bi-directional		⊙
PDO	RA-2065Q	2	45 x 45	Violet	½ Circle	Taper Point	48 mm	CTX	Bi-directional		⊙
PDO	RX-1066Q	2	36 x 36	Violet	½ Circle	Reverse Cutting	40 mm	CP	Bi-directional		▽
PDO	RX-1062Q	2	36 x 36	Violet	½ Circle	Taper Point	36 mm	CT-1	Bi-directional		⊙
PDO	RX-2066Q	2	45 x 45	Violet	½ Circle	Reverse Cutting	40 mm	CP	Bi-directional		▽
PDO	RA-1065Q	2	36 x 36	Violet	½ Circle	Taper Point	48 mm	CTX	Bi-directional		⊙

### SUBCUTANEOUS

Material	Item Code	USP	Length (cm)	Colour	Needle						
PDO	VLP-2012	0	70	Violet	½ Circle	Taper Point	36 mm	CT-1	Uni-directional		⊙
PDO	RX-2068Q	0	45 x 45	Violet	½ Circle	Reverse Cutting	36 mm	CP-1	Bi-directional		▽
PDO	RX-2069Q	0	36 x 36	Violet	½ Circle	Reverse Cutting	36 mm	CP-1	Bi-directional		▽
Monoderm™	YA-2036Q	0	36 x 36	Undyed	½ Circle	Reverse Cutting	36 mm	CP-1	Bi-directional		▽
Monoderm™	YA-2035Q	0	45 x 45	Undyed	½ Circle	Reverse Cutting	36 mm	CP-1	Bi-directional		▽
Monoderm™	YA-1029Q	0	36 x 36	Undyed	½ Circle	Taper Point	36 mm	CT-1	Bi-directional		⊙

### SUBCUTICULAR

Material	Item Code	USP	Length (cm)	Colour	Needle						
Monoderm™	YA-2024Q	2-0	30 x 30	Undyed	¾ Circle	Precision Reverse Cutting	24 mm	PS-1	Bi-directional		▽
Monoderm™	YA-2023Q	3-0	30 x 30	Undyed	¾ Circle	Precision Reverse Cutting	24 mm	PS-1	Bi-directional		▽
Monoderm™	YA-2022Q	2-0	30 x 30	Undyed	¾ Circle	Precision Reverse Cutting	19 mm	PS-2	Bi-directional		▽
Monoderm™	YA-2021Q	3-0	30 x 30	Undyed	¾ Circle	Precision Reverse Cutting	19 mm	PS-2	Bi-directional		▽
Monoderm™	YA-2033Q	3-0	40 x 40	Undyed	¾ Circle	Precision Reverse Cutting	24 mm	PS-1	Bi-directional		▽
Monoderm™	YA-2034Q	2-0	40 x 40	Undyed	¾ Circle	Precision Reverse Cutting	24 mm	PS-1	Bi-directional		▽



## Key Terminology

**ACETABULUM:** The socket of the hip joint

**ARTHROPLASTY:** Surgical procedure that replaces damaged joints

**ARTHROSCOPY:** A minimally invasive diagnostic and treatment procedure used for conditions of a joint

**BURSA:** A sac filled with fluid located between a bone and a tendon or muscle

**CARTILAGE:** A smooth material that covers bone ends of a joint to cushion the bone and allow the joint to move easily without pain

**FEMORAL HEAD:** The ball of the hip joint

**FEMUR:** Thighbone

**FRACTURE:** A break in a bone

**JOINT:** Where the ends of two or more bones meet

**LIGAMENT:** A white, shiny, flexible band of fibrous tissue that binds joints together and connects various bones and cartilage

**MENISCI:** Two crescent-shaped discs of connective tissue between the bones of the knees that act as shock absorbers

**PATELLA:** Kneecap

**TENDON:** The tough cords of tissue that connect muscles to bones

**TIBIA:** Shin bone or larger bone of the lower leg

**Quill** BARBED  
SUTURE  
by **corzamedical**

