

Advanced Architecture for **Surgery**





Orthopaedic Surgery

Knee Replacement



Knee replacement, also called arthroplasty, is a surgical procedure to resurface a knee damaged by arthritis. Metal and plastic components are used to cap the ends of the bones that form the knee joint, along with the kneecap. This surgery may be considered for someone who has severe arthritis or a severe knee injury.

Layer	Suture Material	Suture Size	Needle Tip	Needle Curvature	Product Code
	ADVACRYL PLUS	1	RC / RB	1/2 Circle	ADVA2421P / ADVA2347P
Quadriceps	ADVACRYL PLUS	2	RC	1/2 Circle	ADVA2478P
Tendon	ADVACRYL	1	RC / RB	1/2 Circle	ADVA2421 / ADVA2347
	ADVACRYL	2	RC	1/2 Circle	ADVA2478
	ADVACRYL PLUS	0	RB / RC	1/2 Circle	ADVA2346P / ADVA2534P
Subcutaneous	ADVACRYL PLUS	2-0	RC	1/2 Circle	ADVA2382P
Tissue	ADVACRYL	0	RB / RC	1/2 Circle	ADVA2346 / ADVA2534
	ADVACRYL	2-0	RB / RC	1/2 Circle	ADVA2345 / ADVA2382
Skin	ADVALON	2-0, 3-0	RC	3/8 Circle	ADVA3336 / ADVA3328
	ADVAMRYL	3-0	RC / CT	3/8 Circle	ADVA3326M / ADVA1326

Hip Replacement



Hip replacement surgery is a procedure in which a orthopedician surgically removes a painful hip joint with arthritis and replaces it with an artificial joint often made from metal and plastic components. It is usually done when all other treatment options have failed to provide adequate pain relief.

Layer	Suture Material	Suture Size	Needle Tip	Needle Curvature	Product Code
	ADVACRYL PLUS	1	RC / RB	1/2 Circle	ADVA2421P / ADVA2347P
Joint	ADVACRYL PLUS	2	RC	1/2 Circle	ADVA2478P
Capsule	ADVACRYL	1	RC / RB	1/2 Circle	ADVA2421 / ADVA2347
	ADVACRYL	2	RC	1/2 Circle	ADVA2478
	ADVACRYL PLUS	1	RC / RB	1/2 Circle	ADVA2421P / ADVA2347P
Tensor Fascia	ADVACRYL PLUS	2	RC	1/2 Circle	ADVA2478P
Latae	ADVACRYL	1	RC / RB	1/2 Circle	ADVA2421 / ADVA2347
	ADVACRYL	2	RC	1/2 Circle	ADVA2478
Muscle &	ADVACRYL PLUS	0	RB / RC	1/2 Circle	ADVA2346P / ADVA2534P
Subcutaneous	ADVACRYL PLUS	2-0	RC	1/2 Circle	ADVA2382P
	ADVACRYL	0	RB / RC	1/2 Circle	ADVA2346 / ADVA2534
Tissue	ADVACRYL	2-0	RB / RC	1/2 Circle	ADVA2345 / ADVA2382
Skin	ADVALON	2-0, 3-0	RC	3/8 Circle	ADVA3336 / ADVA3328
SKIII	ADVAMRYL	3-0	RC	3/8 Circle	ADVA3326M

Shoulder Replacement



In shoulder replacement surgery, orthopedicians replace the ends of the damaged upper arm bone (humerus) and usually the shoulder bone (scapula) or cap them with artificial surfaces lined with plastic or metal and plastic.

Layer	Suture Material	Suture Size	Needle Tip	Needle Curvature	Product Code
Dalkaid Massala	ADVACRYL PLUS	1	RC / RB	1/2 Circle	ADVA2421P / ADVA2347P
Deltoid Muscle	ADVACRYL	1	RC / RB	1/2 Circle	ADVA2421 / ADVA2347
	ADVACRYL PLUS	0	RB / RC	1/2 Circle	ADVA2346P / ADVA2534P
Subcutaneous	ADVACRYL PLUS	2-0	RC	1/2 Circle	ADVA2382P
Tissue	ADVACRYL	0	RB / RC	1/2 Circle	ADVA2346 / ADVA2534
	ADVACRYL	2-0	RB / RC	1/2 Circle	ADVA2345 / ADVA2382
Skin	ADVALON	2-0, 3-0	RC	3/8 Circle	ADVA3336 / ADVA3328
	ADVAMRYL	3-0	RC	3/8 Circle	ADVA3326M



Gynecological Surgery

Episiorrhaphy



An episiorrhaphy is a surgical repair of injury to the vulva (or incision made through the perineum to enlarge the vagina for the baby to pass through during episiotomy) by suturing it.

Layer	Suture Material	Suture Size	Needle Tip	Needle Curvature	Product Code
Muscle	ADVACRY RAPID	2-0	TC/RB & RC	1/2 Circle	ADVA2762 / ADVA2777
Vaginal Mucosa	ADVACRYL RAPID	2-0	TC/RB	1/2 Circle	ADVA2762 / ADVA2777
	ADVACAT	2-0, 0	RB	1/2 Circle	ADVA4241 / ADVA4242/ ADVA4246
Skin	ADVAMRYL	3-0	RC	3/8 Circle	ADVA3326M

C-Section



Caesarean section, also commonly known as C - section is a surgical procedure in which incision is made through a woman's abdomen to deliver one or more babies. A Caesarean section is often performed when a vaginal delivery would put the baby's or mother's life or health at risk.

Layer	Suture Material	Suture Size	Needle Tip	Needle Curvature	Product Code
Uterus	ADVACRYL PLUS	1	RB	1/2 Circle	ADVA2347P
Oterus	ADVACRYL	1	RB	1/2 Circle	ADVA2347
Rectus Sheath	ADVALENE	0	RB	1/2 Circle	ADVA833 (LOOP)
Muscle	ADVACRYL PLUS	1, 0	RB	1/2 Circle	ADVA2347P / ADVA2346P
Muscie	ADVACRYL	1, 0	RB	1/2 Circle	ADVA2347 / ADVA2346
Subcutaneous Tissue	ADVAMRYL	3-0	RC	3/8 Circle	ADVA3326M
Skin	ADVAMRYL	3-0	RC	3/8 Circle	ADVA3326M
	ADVALON	2-0, 3-0	RC	3/8 Circle	ADVA3336 / ADVA3328

Hysterectomy



Hysterectomy is surgery to remove the uterus. Removing the uterus means that the woman can no longer become pregnant.

Layer	Suture Material	Suture Size	Needle Tip	Needle Curvature	Product Code
Wall Closure	ADVACRYL PLUS	1	RB	1/2 Circle	ADVA2347P
vvaii Ciosure	ADVACRYL	1	RB	1/2 Circle	ADVA2347
Muscle	ADVACRYL PLUS	1, 0	RB	1/2 Circle	ADVA2347P / ADVA2346P
Muscie	ADVACRYL	1, 0	RB	1/2 Circle	ADVA2347 / ADVA2346
Subcutaneous Tissue	ADVAMRYL	3-0	C/RC	3/8 Circle	ADVA1326 / ADVA3326M
Skin	ADVAMRYL	3-0	RC	3/8 Circle	ADVA3326M
	ADVALON	2-0, 3-0	RC	3/8 Circle	ADVA3336 / ADVA3328



General & Gastro Surgery

Appendectomy



An appendectomy is the surgical removal of the appendix. It's common emergency surgery that's performed to treat appendicitis, an inflammatory condition of the appendix. The appendix is a small, tube-shaped pouch attached to your large intestine. It's located in the lower right side of your abdomen.

Layer	Suture Material	Suture Size	Needle Tip	Needle Curvature	Product Code
Appendix Defect	ADVACRYL PLUS	2-0	RB	1/2 Circle	ADVA2317P
Closure	ADVACRYL	2-0	RB	1/2 Circle	ADVA2317
Muscle &	ADVACRYL PLUS	0, 2-0	RB	1/2 Circle	ADVA2346P / ADVA2317F
Aponeurosis	ADVACRYL	0, 2-0	RB	1/2 Circle	ADVA2346 / ADVA2317
Subcutaneous	ADVACRYL PLUS	1, 2-0	RB	1/2 Circle	ADVA2347P / ADVA2317F
Tissue	ADVACRYL	1, 2-0	RB	1/2 Circle	ADVA2347 / ADVA2317
Skin	ADVALON	2-0, 3-0	RC	3/8 Circle	ADVA3336 / ADVA3328
	ADVAMRYL	3-0	RC	3/8 Circle	ADVA3326M

Laparotomy



A Laparotomy is a surgical procedure involving a large incision through the abdominal wall to gain access into the abdominal cavity.

Layer	Suture Material	Suture Size	Needle Tip	Needle Curvature	Product Code
Peritoneum	ADVACRYL PLUS	2-0, 3-0	RB	1/2 Circle	ADVA2317P / ADVA2437P
rentoneum	ADVACRYL	2-0, 3-0	RB	1/2 Circle	ADVA2317 / ADVA2437
	ADVACRYL PLUS	1, 2-0	RB	1/2 Circle	ADVA2347P / ADVA2317P
Muscle & Fascia Closure	ADVACRYL	1, 2-0	RB	1/2 Circle	ADVA2347 / ADVA2317
	ADVAPD	1, 0	RB	1/2 Circle	ADVA9352 / ADVA9371
Subcutaneous	ADVACRYL PLUS	1, 2-0	RB	1/2 Circle	ADVA2347P / ADVA2317P
Fat	ADVACRYL	1, 2-0	RB	1/2 Circle	ADVA2347 / ADVA2317
Skin	ADVALON	2-0, 3-0	RC	3/8 Circle	ADVA3336 / ADVA3328
	ADVAMRYL	3-0	RC	3/8 Circle	ADVA3326M

Laparoscopic cholecystectomy



Laparoscopic cholecystectomy, commonly referred to as lap chole, involves the removal of the gallbladder through a laparoscopic approach. The gallbladder normally stores bile produced in the liver until it is needed for digestion. Unfortunately, the gallbladder often forms gallstones.

Layer	Suture Material	Suture Size	Needle Tip	Needle Curvature	Product Code
Closure of Port	ADVACRYL PLUS	1	RC	1/2 Circle	ADVA2826P
Defect	ADVACRYL	1	RC	1/2 Circle	ADVA2826 / ADVA2826E
Ligating Cystic Artery	ADVASYL	3-0, 2-0	NA	NA	ADVA212 / ADVA213
Ligating Cystic Duct	ADVASYL	3-0, 2-0	NA	NA	ADVA212 / ADVA213
ci.	ADVACRYL PLUS	1	RB	1/2 Circle	ADVA2347P
Skin	ADVACRYL	1	RB	1/2 Circle	ADVA2347



General & Gastro Surgery

Femoral Hernia



If a portion of tissue pushes through the wall of the femoral canal, it's called a femoral hernia. A femoral hernia will appear as a bulge near the groin or thigh.

Layer	Suture Material	Suture Size	Needle Tip	Needle Curvature	Product Code
Tension Suturing/ Matrix Suture	ADVALENE	2-0, 0	RB	1/2 Circle	ADVA844, ADVA830
	ADVALENE	1, 0	RB	1/2 Circle	ADVA840, ADVA830
Mesh Fixation	ADVAMESH		Mesh Size (.5 X 15, 10	ADVAP0611, ADVAP7515 ADVAP1015, ADVAP7615	
Muscle Closure	ADVACRYL PLUS	2-0	RB	1/2 Circle	ADVA2317P
Muscie Ciosure	ADVACRYL	2-0	RB	1/2 Circle	ADVA2317
Subcutaneous	ADVACRYL PLUS	2-0	RB	1/2 Circle	ADVA2317P
Fat	ADVACRYL	2-0	RB	1/2 Circle	ADVA2317
Skin	ADVALON	2-0, 3-0	RC	3/8 Circle	ADVA3336, ADVA3328
	ADVAMRYL	3-0	RC	3/8 Circle	ADVA3326M

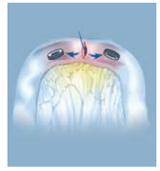
Inguinal Hernia



An inguinal hernia happens when contents of the abdomen - usually fat or part of the small intestine - bulge through a weak area in the lower abdominal wall.

Layer	Suture Material	Suture Size	Needle Tip	Needle Curvature	Product Code
Tension Suturing/ Matrix Suture	ADVALENE	2-0, 3-0	RB	1/2 Circle	ADVA844, ADVA825
	ADVALENE	1, 0	RB	1/2 Circle	ADVA840, ADVA830
Mesh Fixation	ADVAMESH	06 X 11, 7	Mesh Size (.5 X 15, 10	cm) X 15, 7.6 X 15	ADVAP0611, ADVAP7515, ADVAP1015, ADVAP7615
Muscle Closure	ADVACRYL PLUS	2-0	RB	1/2 Circle	ADVA2317P
Muscie Ciosure	ADVACRYL	2-0	RB	1/2 Circle	ADVA2317
Subcutaneous	ADVACRYL PLUS	2-0	RB	1/2 Circle	ADVA2317P
Fat	ADVACRYL	2-0	RB	1/2 Circle	ADVA2317
Cl.i.	ADVALON	2-0, 3-0	RC	3/8 Circle	ADVA3336, ADVA3328
Skin	ADVAMRYL	3-0	RC	3/8 Circle	ADVA3326M

Bowel Anastomosis



Is a surgical procedure involves joining the two ends of the bowel which have been excised to remove the diseased or obstructed segment.

Layer	Suture Material	Suture Size	Needle Tip	Needle Curvature	Product Code		
Mesentery	ADVACRYL PLUS	2-0, 3-0	RB	1/2 Circle	ADVA2317P / ADVA2437P		
Mesentery	ADVACRYL	2-0, 3-0	RB	1/2 Circle	ADVA2317 / ADVA2437		
p. 1	ADVACRYL PLUS	2-0, 3-0	RB	1/2 Circle	ADVA2317P / ADVA2437P		
Bowel	ADVACRYL	2-0, 3-0	RB	1/2 Circle	ADVA2317 / ADVA2437		
Anastomosis	ADVASYL	2-0, 3-0	RB	1/2 Circle	ADVA5331 / ADVA5085		
Muscle	ADVACRYL PLUS	2-0	RB	1/2 Circle	ADVA2317P		
Muscie	ADVACRYL	2-0	RB	1/2 Circle	ADVA2317		
Subcutaneous	ADVACRYL PLUS	2-0	RB	1/2 Circle	ADVA2317P		
Fat	ADVACRYL	2-0	RB	1/2 Circle	ADVA2317		
Skin	ADVALON	2-0, 3-0	RC	3/8 Circle	ADVA3336, ADVA3328		
	ADVAMRYL	3-0	RC	3/8 Circle	ADVA3326M		

^{*} Mesh size is directly proportional to Hernia size.



Gastro Surgery

Gastrectomy

Is the surgical removal of all or part of the stomach



A partial gastrectomy is the removal of a part of the stomach. It's usually the lower half that's removed.



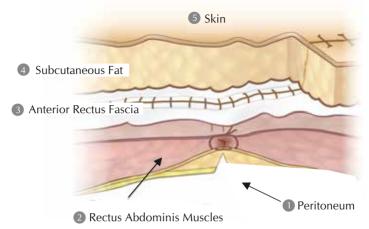
A total gastrectomy is the removal of the entire stomach.

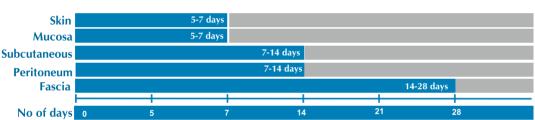


A sleeve gastrectomy is the removal of greater curvature (left side) of the stomach. This is usually a step in Bariatric surgery to achieve weight loss.

Layer Suture Material		Suture Needle Size Tip		Needle Curvature	Product Code	
Ligation of Blood vessels of Stomach	ADVASYL	3-0	Non Needle	Non Needle	ADVA212	
Anastomosis of Stomach with Duodenum	ADVACRYL PLUS	2-0, 1	Round Bodied	1/2 Circle	ADVA2317P / ADVA2347P	
	ADVACRYL	ADVACRYL 2-0, 1 Round Bodied 1/		1/2 Circle	ADVA2317 / ADVA2347	
	ADVASYL	2-0, 3-0	Round Bodied	1/2 Circle	ADVA5331 / ADVA5085	
	ADVACRYL PLUS	2-0	Round Bodied	1/2 Circle	ADVA2317P	
Muscle	ADVACRYL	2-0	Round Bodied	1/2 Circle	ADVA2317	
C. L	ADVACRYL PLUS	2-0	Round Bodied	1/2 Circle	ADVA2317P	
Subcutaneous Fat	ADVACRYL	2-0	Round Bodied	1/2 Circle	ADVA2317	
Skin	ADVALON	2-0, 3-0	Reverse Cutting	3/8 Circle	ADVA3336 / ADVA3328	
SKIII	ADVAMRYL	3-0	Reverse Cutting	3/8 Circle	ADVA3326M	

The Suture Choice is Dependent Upon Critical Wound Healing Period of the Tissue





Critical Wound Healing Time Period

Product Categories

	ADVACRYL	ADVACRYL RAPID	ADVAMRYL	ADVAPD	ADVALENE	ADVABOND	ADVALON	ADVASYL	ADVACAT
Composition	90% Glycolide, 10% L-lactide Braided Coated Synthetic Absorbable Surgical Suture	90% Glycolide, 10% L-lactide Braided Coated Synthetic Absorbable Surgical Suture	Poliglecaprone 25 Monofilament Synthetic Absorbable Surgical Suture	Polydioxanone Monofilament Synthetic Absorbable Surgical Suture	Polypropylene Monofilament Synthetic Non-Absorbable Surgical Suture	Polyethylene Terephthalate Braided Coated Synthetic Non-Absorbable Surgical Suture	Polyamide / Nylon Monofilament Synthetic Non-Absorbable Surgical Suture	Proteinaceous Silk Fibers called Fibroin, Braided Natural Non-Absorbable Surgical Suture	Collagen from Submucosal layer Natural Absorbabl Surgical Suture
Tensile Strength* (in days)	70% - 14 days 50% - 21 days 20% - 28 days	50% - 5 - 7 days All of the original tensile strength is lost by approximately 10 to 14 days post implantation	Dyed 60% Undyed 55% - 7 days Dyed 40% Undyed 15-20% - 14 days	80% - 14 days 70% - 28 days 45% - 42 days	Permanent	Gradual encapsulation of suture by fibrous connective tissue	Gradual loss in tensile strength over a period of time. Gradual encapsulation of suture by fibrous connective tissue	Gradual loss in tensile strength over a period of time. Gradual encapsulation of suture by fibrous connective tissue	Plain 10 to 12 days Chromic 21 to 25 days
Mass Absorption* (in days)	Upto 80	Upto 42	Upto 90	180 - 220	Non-Absorbable	Non-Absorbable	Non-Absorbable	Non-Absorbable	84
Sizes	U.S.P. Size 2 to 10-0	Size 2 to 8-0	Size 2 to 6-0	Size 2 to 9-0	U.S.P. Size 2 to 10-0	Size 5 to 7-0	U.S.P. Size 2 to 11-0	U.S.P. Size 5 to 8-0	U.S.P. Size 3 to 6-0
Colour	Undyed and Violet	Undyed and Violet	Undyed and Violet	Violet	Blue	White (Undyed) and Green	Black	Black	Yellow and Beige
Needle Availability	Round Bodied, Cutting, Reverse Cutting, Taper Cut, Oval Round Bodied, Trocar, Blunt , Ball Point, Diamond Point and Spatula	Round Bodied, Cutting, Reverse Cutting, Taper Cut, Oval Round Bodied, Trocar, Blunt , Ball Point, Diamond Point and Spatula	Round Bodied, Cutting, Reverse Cutting, Taper Cut, Oval Round Bodied, Trocar, Blunt Point and Diamond Point needles	Round Bodied, Cutting, Reverse Cutting, Taper Cut, Oval Round Bodied, Trocar, Blunt , Ball Point, Diamond Point and Spatula	Round Bodied, Cutting, Reverse Cutting, Taper Cut, Oval Round Bodied, Trocar, Blunt , Ball Point, Diamond Point and Sternal Reverse	Round Bodied, Cutting, Reverse Cutting, Taper Cut, Oval Round Bodied, Trocar, Blunt , Ball Point, Diamond Point and Spatula	Round Bodied, Cutting, Reverse Cutting, Taper Cut, Oval Round Bodied, Trocar, Blunt , Ball Point, Diamond Point and Spatula	Round Bodied, Cutting, Reverse Cutting, Taper Cut, Oval Round Bodied, Trocar, Blunt , Ball Point and Diamond Point needles	Available as Pre-cut Sutures and Round Bodied, Taper Cut, Cutting and Reverse Cutting needles

^{*}These are approximate days which may very with size.

^{*}Mass Absorption: Time in days required for suture to be totally absorbed by the body.

Where every suture is a seal of confidence



