AST BACK TO BASICS

COLORECTAL PROCEDURES
LAPAROSCOPIC APPENDECTOMY

Procedural Keys Steps:

1. **Exposure**
   Appendix and mesentery

2. **Ligation**
   Appendicular artery branches

3. **Resection**
   a. Appendix or
   b. Proximal caecum (necrosis)

4. **Extraction**
   Specimen, avoiding abdominal wall contact

5. **Cleaning**
   Peritoneal cavity, with a saline solution
LOW ANTERIOR RESECTION (LAR)

Procedural Keys Steps:

1. **Ligation**
   - Inferior mesenteric artery (IMA)
   - Inferior mesenteric vein (IMV)

2. **Mobilization**
   - Sigmoid
   - Upper rectum

3. **Dissection**
   - Lower rectum

4. **Mobilization**
   - Splenic flexure

5. **Distal Resection**
   - Rectum

6. **Proximal Resection**
   - Sigmoid

7. **Extraction (only Lap.)**
   - Specimen

8. **Anastomosis**
   - End-to-end or J-pouch

9. **Anastomosis Control**
   - Air or dye test

AST PORTFOLIO:

**Open Technique**
LigaSure™ Open Devices (1-4)
- Xtd
- Blunt Tip 20cm
- Atlas 20 cm
- Dolphin Tip 20cm
- Impact

Radial Reload (5)
DST TA (5)
DST GIA (6)
Purstring (6)
DST EEA (8)

**Lap. Technique**
LigaSure™ Lap. Devices (1-4)
- Blunt Tip 37cm
- Atlas 37cm
- Maryland 37cm

Manual/Power handle (5,6)
Tri-Staple reloads (5,6)
Purstring (6)
DST EEA (8)

Images 1, 2, 3, 4 and 7 provided by IRCAD
http://www.websurg.com/doi-ot02en202.htm
STAPLED HEMORRHOIDOPEXY

Procedural Keys Steps:

1. Lubricate the Dilator and insert the Anoscope Kit
2. Remove Dilator and Anoscope and fix the Port to the buttocks
3. Reinsert Dilator and Anoscope and remove the Dilator
4. Pre-thread the suture through the Anoscope
5. Place a pursestring suture in the Mucosa and Submucosa
6. Remove the Anoscope
7. Attach the pursestring to the appropriate anchor point of the Anvil's center rod
8. Insert the detachable Anvil into the rectum, near to the suture and connect it to the Stapler
9. Close the Stapler until the green indicator appears
10. Fire the stapler and inspect the staple line and specimens

AST PORTFOLIO: Hemorrhoidal Stapler (1-10)
RIGHT HEMICOLECTOMY

Procedural Keys Steps:

1. **Ligation**
   a. Ileocolic vessels
   b. Right colic vessels

2. **Resection**
   a. Transverse mesocolon
   b. Transverse colon
   c. Greater omentum

3. **Resection**
   Ileum

4. **Mobilization**
   a. Ascending colon
   b. Hepatic flexure

5. **Extraction (only Lap.)**
   Specimen

6. **Anastomosis**
   Side-to-side ileocolic

7. **Closure**
   Mesocolic defect

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AST PORTFOLIO:

**Open Technique**
LigaSure™ Open Devices (1, 2ac)
- Impact
- Blunt Tip 20 cm
- Maryland 23 cm

DST GIA (2b, 3)
LigaSure™ Open Devices (4)
DST GIA (5)

**Lap. Technique**
LigaSure™ Lap. Devices (1, 2ac)
- Blunt Tip 37 cm
- Atlas 37 cm
- Maryland 37 cm

Manual/Power handle (2b, 3)
Tri-Staple reloads (2b, 3)

LigaSure™ Lap. Devices (4)
Manual/Power handle (5)
Tri-Staple reloads (5)

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All images gently provided by IRCAD
http://www.websurg.com/doi-ot02en335.htm
SIGMOIDECTOMY

Procedural Keys Steps:

1. **Ligation**
   a. Inferior mesenteric artery (IMA)
   b. Selective sigmoid arteries

2. **Mobilization**
   a. Sigmoid
   b. Left colon
   c. Splenic flexure

3. **Distal Resection**
   a. Mosorectum
   b. Distal Sigmoid

4. **Proximal Resection**
   a. Mesocolon
   b. Proximal Sigmoid

5. **Extraction (only Lap.)**
   Specimen

6. **Anastomosis**
   Circular end-to-end

7. **Anastomosis control**
   Air test/endoscopic evaluation

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AST PORTFOLIO:

**Open Technique**
LigaSure™ Open Devices

- Impact
- Blunt Tip 20 cm
- Dolphin Tip 20 cm
- Atlas 20 cm

LigaSure™ Open Devices

- DST GIA
- DST EEA

**Lap. Technique**
LigaSure™ Lap. Devices

- Blunt Tip 37 cm
- Atlas 37 cm
- Maryland 37 cm

LigaSure™ Lap. Devices

Manual/Power handle

Tri-Staple reloads

DST EEA
TRANSACTION ENDOSCOPIC MICRO SURGERY (TEM*)

**Procedural Keys Steps:**

1. Air Insulation Intrarectal space
2. Resection Tumor
3. Extraction Specimen
4. Washing Operative region with betadine solution
5. Repair Rectal wall suturing

*Indicated for tumor cases located between 4 and 18 cm above the anal verge

All images gently provided by IRCAD
[http://www.websurg.com/doi-ot02en204.htm](http://www.websurg.com/doi-ot02en204.htm)
TRANSANAL TOTAL MESORECTAL EXCISION (TATME)

Procedural Keys Steps:

1. **Ligation**
   Inferior mesenteric artery (IMA)
   Inferior mesenteric vein (IMV)

2. **Pursestring placement**
   Lower rectum

3. **Section**
   Rectum

4. **Transanal mobilization**
   Mesorectum

5. **Pursestring placement**
   Lower rectum

6. **Laparoscopic mobilization**
   a. Upper rectum
   b. Sigmoid

7. **Transanal extraction**
   Colorectal

8. **Pursestring placement**
   Proximal rectum

9. **Anastomosis Control**
   Circular end-to-end

AST PORTFOLIO:
LigaSure™ Open Devices  (1, 6)
- Blunt Tip 20 cm²
- Maryland 23 cm

Force Trivers ES  (3, 4, 6)

Purstring  (8)
DST HEEA  (9)
REFERENCES

1. LigaSure™ Xtd Reusable Hand Switching Instrument
2. LigaSure™ Blunt Tip Open Sealer/Divider, 5 mm – 20 cm
3. LigaSure Atlas™ Tissue Fusion Open Instrument, 10 mm – 20 cm
4. LigaSure™ Dolphin Tip Open Sealer/Divider, 5 mm – 20 cm
5. LigaSure Impact™ Tissue Fusion Open Instrument, 13.5 mm – 18 cm
6. LigaSure™ Blunt Tip Laparoscopic Sealer/Divider, 5 mm – 37 cm
7. LigaSure Atlas™ Tissue Fusion Laparoscopic Instrument, 10 mm – 37 cm
8. LigaSure™ Maryland Jaw Laparoscopic Sealer/Divider, One-step Sealing 5 mm – 37 cm
9. LigaSure™ Maryland Jaw Open Sealer/Divider, One-step Sealing 5 mm – 23 cm
10. Force TriVerse™ Electrosurgical Device, Holster
11. Endo GIA™ Radial Reload with Tri-Staple™ Technology
12. DST Series™ TA™ Single Use Reloadable Stapler
13. DST Series™ GIA™ Single Use Reloadable Stapler
14. Purstring™ 65 Instrument
15. DST Series™ EEA™ Staplers
16. Endo GIA™ Next Generation Standard Handle/iDrive™ Ultra Powered Stapling System
17. Endo GIA™ Tri-Staple™ Reloads
18. EEA™ Hemorrhoid and Prolapse Stapler Set with DST Series™ Technology

IMPORTANT: Please refer to the package insert for complete instructions, contraindications, warnings and precautions.
THANK YOU