# **Robotic Surgery**

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#### Disclosures

I have no financial disclosures

#### Learning Objectives

- 1. Describe the concept of robotic surgery to a patient
- 2. Compare the benefits and drawbacks of robotic surgery
- 3. Summarize the most common procedures performed robotically

#### What is considered a "Robot"?







# Examples





# Da Vinci Robot by Intuitive









#### Compared to traditional Laparoscopy

#### **Advantages**

Degree of motion: 4 vs. 7 "endowrist"

-especially helpful in pelvis and hiatus

Camera: 1 vs. 2 Lenses- control

3rd Arm

Fulcrum- obesity

ICG + Fluorescence camera

### Endowrist suturing vs. laparoscopic suturing

Robotic

https://youtu.be/crMKcJMpfZ4

Laparoscopic

https://youtu.be/VOG1D\_rDFGs

### Compared to traditional Laparoscopy

#### **Disadvantages**

Instrument exchanges

"Haptics"

Port Size 5mm vs. 8mm

Cost

Experience?

#### **Robotics Credentialing**

Still not entirely defined

Not a residency requirement, Unlike laparoscopy

5 Modules

## **Robotics Training Post graduation**

Davinci Courses

Proctors

Conferences

Social media?

#### Most common procedures performed

- 1. Prostatectomy
- 2. Hysterectomy
- 3. Colon/Rectal resection
- 4. Lobectomy (Lung)

## Most Common General Surgery Procedures

inguinal hernia

ventral hernia

Cholecystectomy

hiatal hernia/fundoplication

bariatric surgery

Splenectomy

esophagectomy.

-specialized centers: whipple, liver resections

#### **Questions Patients Could Ask**

- 1. How long have you been doing robotic surgery?
- 2. What advantage does robotic surgery give you as a surgeon?

#### Example, Inguinal hernia

https://youtu.be/UiVd4nBTYEA



#### References

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https://www.davincisurgery.com/