

Recent Changes in the Field of Surgery

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Abstract

In the past decades, the domain of surgery has excessively proceed to a new generation of technological and scientific establishments. Nowadays surgery is not only performed for restoration and reconstruction. The development of new techniques and the advanced awareness of medical community contribute to the formation of modern medicine where surgery has major role in cure. Minimally invasive surgery, laparoscopy, telemedicine, enhanced Recovery After Surgery (ERAS), precision surgery, patient-centered care compose a dynamic and patient-centered medical progress with various beneficial results.

1. Editorial Text

Surgery is a medical specialty that has undergone significant changes in recent years due to advances in technique, technology, and patient care [1]. These changes have improved surgical outcomes, complications, and increased patient satisfaction. This article discusses some of the recent changes in the field of surgery.

2. Minimally Invasive Surgery

One of the biggest changes in the field of surgery is the move to minimally invasive surgery [2]. These procedures require access to the surgical site through a small incision and special instruments, resulting in less pain, less scarring, and faster recovery time than with traditional open surgery. Commonly performed minimally invasive surgeries include laparoscopy, arthroscopy, and robotic surgery.

Laparoscopy uses an endoscope (a thin, lighted tube with a camera) to look inside the body and perform surgical procedures. Arthroscopy uses an arthroscope, a thin, lighted tube with a camera attached, to look inside joints and perform surgical procedures. In robotic surgery, a surgeon controls a robot from a control panel and uses it to perform surgery. The robotic arm is equipped with special tools that allow precise movements that are not possible with the human hand. Minimally invasive surgery has many benefits, including reduced pain, scarring, faster recovery time, and reduced risk of infection and other complications. In addition, patients can return to normal activities sooner after surgery [3].

3. Telemedicine

Telemedicine has revolutionized the way medical services, including surgery, are delivered. Telemedicine allows the surgeon

to communicate remotely with the patient and provide her with pre-operative advice and monitor her care. Telemedicine has enabled surgeons to perform consultations and surgery remotely, especially in rural areas where access to specialist care is limited. Telemedicine has many benefits, including better access to care, reduced travel time and costs, and increased patient satisfaction. Surgeons may also work with other health care providers to improve patient outcomes [4].

4. Enhanced Recovery after Surgery (Eras)

Advanced Postoperative Rehabilitation (ERAS) is a multidisciplinary approach to patient care that includes preoperative, intraoperative, and postoperative interventions to optimize patient outcomes. . . The ERAS protocol has been shown to reduce surgical complications and hospitalizations and improve patient satisfaction. Key elements of ERAS include preoperative counseling, optimal pain control, early mobilization, and early postoperative nutrition. The ERAS protocol has many benefits, including fewer complications, shorter hospital stays, and faster recovery times. In addition, patients can return to their normal activities immediately after surgery [5].

5. Precision Surgery

Precision Surgery uses advanced navigation, robotics and image processing systems to improve the precision and accuracy of surgical procedures. Precision surgery has been shown to improve patient outcomes, reduce complications, and shorten recovery time. Examples of precision surgery include robot-assisted surgery and image-guided surgery [6]. In robotic surgery, a surgeon controls a robot from a control panel and uses it to perform surgery. The robotic arm is equipped with special tools that allow precise move-

ments that are not possible with the human hand. Image-guided surgery uses advanced imaging techniques, such as magnetic resonance imaging (MRI) and computed tomography (CT), to create detailed maps of the surgical site. This map is used to guide surgical instruments during surgery. Precision surgery has many benefits, including increased accuracy, fewer complications, and faster recovery time. It also allows surgeons to perform procedures that are difficult or impossible to perform with traditional surgical techniques, improving patient outcomes.

6. Patient-Centered Care

Patient-centered care is an approach to healthcare that puts the patient at the center of the care team. It involves a partnership between the patient, the surgeon, and other healthcare providers to create a personalized treatment plan that meets the individual needs and preferences of the patient. Patient-centered care has been shown to improve patient satisfaction, compliance, and outcomes. Patient-centered care includes a range of interventions such as decision sharing, patient education, and patient participation. This also includes considering the patient's cultural background, beliefs, and values when developing a plan of care [7].

7. Conclusion

In summary, the field of surgery has undergone major changes in recent years due to advances in technology, engineering, and patient care. These changes have improved surgical outcomes, reduced complications, and increased patient satisfaction. Recent changes in the surgical field include a shift to minimally invasive surgery, telemedicine, improved postoperative recovery, precision surgery, and patient-centered care. These changes have improved the overall quality of care for patients undergoing surgery.

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