

The Art and Science of Surgery: An In-Depth Look

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DESCRIPTION

Surgery is a medical specialty that involves the use of operative techniques to diagnose and treat various medical conditions. It is an ancient art and science that has been practiced for thousands of years. Over the years, surgery has undergone significant advancements, and today it is a highly specialized and sophisticated field of medicine. In this article, we will explore the art and science of surgery, its history, modern techniques, and what it takes to become a successful surgeon.

History of surgery

The history of surgery can be traced back to ancient times. Evidence of surgical procedures has been found in the ruins of ancient civilizations such as Egypt, India, and China. In these early civilizations, surgery was often performed by priests or other religious figures that were believed to have special healing powers.

One of the most famous early surgeons was Sushruta, an Indian physician who lived around 600 BCE. Sushruta is often referred to as the father of surgery, as he wrote one of the earliest known texts on surgical procedures, the Sushruta Samhita. The text describes various surgical techniques, including plastic surgery and the removal of tumours.

During the middle ages, surgery was often performed by barbers or other untrained individuals. However, with the advent of modern medicine in the 19th century, surgery became a more specialized field. Anesthesia and antiseptics were developed, allowing for safer and more complex surgical procedures.

Modern surgical techniques

Today, surgery is a highly specialized field that involves a wide range of techniques and procedures. Some of the most common surgical procedures include:

Open surgery: This is the traditional form of surgery, where the surgeon makes an incision to access the surgical site. Open surgery is used for a wide range of procedures, from simple appendectomies to complex organ transplants.

Laparoscopic surgery: This is a minimally invasive form of surgery that involves making several small incisions rather than one large one. A laparoscope, a thin tube with a camera attached, is inserted into one of the incisions, allowing the surgeon to see inside the body and perform the procedure using small instruments.

Robotic surgery: This is a newer form of surgery that involves the use of robotic arms to perform the procedure. The surgeon controls the robot using a computer console, and the robot's arms perform the actual surgery. Robotic surgery is often used for complex procedures, such as heart surgery and cancer surgery.

Endoscopic surgery: This is a form of surgery that involves the use of an endoscope, a flexible tube with a camera attached, to perform the procedure. Endoscopic surgery is often used for procedures such as colonoscopies and bronchoscopies.

Qualifications of surgeon

Becoming a surgeon requires extensive education and training. To become a surgeon, one must first complete a bachelor's degree in a science-related field, such as biology or chemistry. After completing their undergraduate degree, aspiring surgeons must then attend medical school and earn a Doctor of Medicine (MD) degree.

After completing medical school, aspiring surgeons must complete a residency program in their chosen field. Residency programs can last anywhere from three to seven years, depending on the specialty. During their residency, surgeons receive hands-on training in surgical techniques and procedures, as well as inpatient care and management.

Once a surgeon completes their residency, they can then become board-certified in their chosen specialty. Board certification requires passing a rigorous examination, and it demonstrates that the surgeon has met the highest standards of training and expertise in their field.

CONCLUSION

Surgery is a complex and challenging field that requires extensive

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Received: 04-Apr-2023, Manuscript No. LDAMR-23-23678; **Editor assigned:** 06-Apr-2023, PreQC No. LDAMR-23-23678 (PQ); **Reviewed:** 20-Apr-2023, QC No. LDAMR-23-23678; **Revised:** 27-Apr-2023, Manuscript No. LDAMR-23-23678 (R); **Published:** 03-May-2023, DOI: 10.12715/2564-8942.23.6.021.

Citation: Jack TT (2023) The Art and Science of Surgery: An In-Depth Look. J Adv Med Res. 6:021.

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education and training. From the ancient civilizations of Egypt and India to the modern robotic surgery of today, surgery has come a long way. The advancement of technology and medical knowledge has allowed surgeons to perform more complex

procedures with higher success rates and fewer complications. However, surgery remains a risky endeavour, and every surgical procedure carries the risk of complications and side effects.