The da Vinci Surgical System
Oluwaseun Ijaduola

The da Vinci surgical system is a system that was design to improve the surgeon’s abilities. It provides the surgeon with fine-tuned controls, a wide range of movement, 3D visuals, and tissue manipulation know-how. It also allows the surgeon to operate through small holes in the body during minimally invasive surgery.

The development of the system started somewhere in the 1980s. An organization named DARPA started funding several groups in order to find the possibility of a remote surgical system that would replace human medics. Even though that was the plan, advancements were made towards telepresence instead. In 1995, the company Intuitive Surgical was formed and came up with the da Vinci system in 1999. As for the equipment, the system contains the surgeon console, the patient side-cart, the endowrist system that has the tools necessary for surgery, and the vision system.

The da Vinci system is an effective, alternative method to traditional surgery. It presents a new option for complex procedures. The benefits for the surgeon include an increase in surgical precision, an increased range of motion, improved visuals, etc. For the patient, the benefits are reduced hospital stay, faster recovery time, etc.

Like most advancements in surgery, the da Vinci system has its limitations. One is that the patient side cart limit’s the assistant surgeon’s access to the patient. Another is that the learning curve of the device is really steep. How steep? It took surgeons about 12 - 18 patients in order to feel comfortable with the device. The major one is that the cost of the system is really high to maintain. Hopefully, in the future, these problems along with other issues can be fixed.

Sources

http://www.intuitivesurgical.com/products/davinci_surgical_system/

http://www.wphospital.org/Programs-Services/Surgical-and-Anesthesia-Services/SurgicalServices-da-Vinci-Surgical-System.aspx/

http://www.intuitivesurgical.com/specialties/

http://www.intuitivesurgical.com/company/history/


