

ADVANCES IN MEDICINE

Surgery is the branch of medicine concerned with treatment of diseases, deformities, and injuries through procedures called operations. People have practiced surgery since ancient times. The modern practice of medicine has developed over thousands of years. Modern surgery looks very different from those early days. This tour will help you to discover some of the advances in medicine that made modern surgery possible.

AMPUTATION PAINTING

This painting depicts an amputation of a man's leg.

Why would the surgeon amputate the patient's leg?

SECOND
FLOOR

Why are there four men holding the patient down?

What do you think happened to the patient after his leg is amputated?

HALL OF IMMORTALS

Antisepsis is the elimination or reduction of the spread of germs (microorganisms) that cause infection, disease or decay.

Read the stories next to the statues to help you identify the names of the three men who contributed to the understanding of antisepsis.

- 1.
- 2.
- 3.

HALL OF MURALS

Find the painting of Michael Servetus. He is an example of a medical pioneer whose beliefs about anatomy were not accepted by most people in his time.

If you were Servetus in his time, would you have published such a controversial book for the sake of medical discovery?

Would you have taken different actions? Why?

WINDOWS TO THE WORLD

Surgical techniques pioneered by ophthalmologists are frequently adopted by the rest of the medical profession.

What is an example of this?



International Museum of Surgical Science

POLIO

The large, grey steel device around which this exhibit is centered is an Iron Lung.
How was the iron lung used to help polio victims?

SECOND
FLOOR

What device would be used today to help someone who was unable to breath?

LATIN AMERICA

The three murals on the walls depict important surgical "firsts" in Central and South America. These procedures were revolutionary at the time.

What are some of the things taking place in the murals that would be different from surgery today?

THIRD
FLOOR

EUROPE

Examine the surgical tools from Ancient Rome 79 A.D. and the Surgical set from the early 1800's. Even though the materials that make the tools changed, the form and function did not change much.

What can you determine the basic functions of these tools might be based on the shape and overall appearances?

JAPAN HALL OF FAME

Today, doctors close wounds using a variety of methods, including stapling and stitching.

What was the procedure used in the 10th Century BC in Japan for closing a wound?

MEDICAL IMAGING

The discovery of the x-ray was an important milestone for surgeons. They could see into a patient's body without having to cut into it. This innovation caused a revolution in medical diagnostics.

Who discovered the x-ray?

What were the 3 basic elements in an early X-Ray Laboratory?

- 1.
- 2.
- 3.



International Museum of Surgical Science

NURSING

Modern nurses dedicate their lives to helping those who are sick and injured.

Who is considered the "Founder of Modern Nursing"?

FOURTH
FLOOR

ENDURING PAIN

The Civil War saw the first widespread use of general anesthesia, which was used on over 80,000 patients.

What type of anesthesia was commonly used?

In the mid-19th century patent medicines, which were not required to list their ingredients, were often just traditional herbal pain remedies repackaged.

What was a major ingredient in many of these "cure-all" medicines?

In 2004, a new drug, Prilact, was approved by the FDA for managing pain in Cancer and AIDS patients.

Why is it not used for many other conditions and ailments?

ORTHOPEDICS

The prostheses of the ancient cultures began as simple crutches or wooden and leather cups. The prostheses on display were developed after the Civil War.

How did the Civil War affect the development of prostheses?

Arthroscopy, a minimally invasive procedure is often employed during meniscectomy, the removal of all or part of a torn meniscus.

What surgical instrument was adapted for arthroscopy?

SPAIN ROOM

Find the painting on the far wall with two scenes of surgery from 1901 and 1819. These two images illustrate surgery during two different eras.

Compare the scenes. List three differences.

- 1.
- 2.
- 3.



SUPPORTING STRUCTURE

Science and technology advance through the contributions of many different individuals.

Name three surgeons and their contributions to the early development of spinal surgery.

- 1.
- 2.
- 3.

FOURTH
FLOOR

CONQUERING HEART DISEASE

Many individuals have contributed to our understanding of the heart and heart disease.

What famous aviator invented the machine that set the stage for the invention of the heart-lung machine?

FOURTH
FLOOR
(ANNEX)

What was his machine called?

