Roman Medicine: The Surgeons and their procedures

Greek Origin on Roman Medicine

When the Roman Empire came to power they adopted many beliefs and practices of the cultures they replaced. This is not limited to medical ideas and procedures. Greek philosophers and intellectuals were among the first group of people to seriously study human anatomy, diet, and medicine. Beginning in the 3rd century BC, Roman Medicine was strongly influenced by Greek medical thought and practices. This can be marked by the arrival in Rome of important physicians such as Hippocrates in 219 BC. Alongside this influence came a Roman desire for a medical health that was better than the Greek one in its efficiency, simplicity and price. This led to more medical writings and discoveries which shaped medicine in the Roman World.

The Roman Surgeon: Qualities and Practices

According to the Roman author Celsus, the best surgeon was a young healthy man who was ambidextrous so that he could make the best use of both his hands, had great vision, a sharp and clear mind, was ready and willing to fix all his patients but would not go too fast because of their cries of pain (Jackson, 112).

The doctors of Roman times were not required to have any sort of degree as medical professionals do today, so most of what they learned was passed on to them from a teacher, writings from other doctors, or their experiences. Alongside imperfect forms of education, doctors of this time were not as knowledgeable about anatomy, diseases, and drugs as we are today. The Romans were strong believers in the idea that one's health was determined by their diet and physical activity.

Sickness and Diseases were usually attributed to something religious, or to an unhealthy diet. When treating a patient, the physician would begin by analyzing and adjusting their diet, then prescribe drugs if necessary, and if all else failed he would resort to surgery. The surgeon would be seen responsible for a failure or recurrence of sickness, therefore they rarely chose this route. Often, doctors would not operate on a terminally ill patient so they would not be blamed for the death.

Anesthetics and Antiseptics

An important difference between Surgery today and in Roman times was the lack of anesthetics and antiseptics. Surgeons usually had no access to anesthetics which means time was of the essence during operations. The physician would have to bone his procedure down to take as little time as possible so the patient wouldn’t be in excruciating pain for too long. Doctors did have some access to pain killers and mild anesthetics. Some sedatives were opium poppy and henbane, used to ease pain. The white mandrake plant was another anesthetic often used before surgery because of the hyoscine and atropine that would make the patient sleep. Doctors of this time didn’t know about antiseptics, therefore patients would often die from dirty instruments, or infection usually from abdominal surgery. Even though they had some system of hygiene and cleanliness, it wasn’t organized well enough to keep patients from dying often.

Medical Writers

Throughout Roman history authors and citizens experimented and wrote on the medical field. However the encyclopedias of Celsus and Pliny the Elder are very well known, and do a good job of recording medical procedures and knowledge. Also, much of the medical advancements in Rome came from the Greek born Galen.

- Celsus wrote and lived around the 1st century C.E., as a wealthy land owner, and not as a physician. He believed in the idea that one could be his own physician. Included in his extensive encyclopedia was the book De Medicina, written in Greek around 46 C.E.. Celsus recorded many different procedures including how fractures were set, how teeth and eyes were healed, and how use medicines.

- Pliny the elder lived around the same time as Celsus and compiled general knowledge about the world into his massive work Historia Naturalis. This work didn’t add new knowledge to Roman medicine, but it did order information about drugs and diet relating to plants and animals.

- Born in 129 C.E., Galen wrote many important books and acquired great knowledge regarding medicine and philosophy. Even though he was of Greek origin, he still travelled and lived in the Roman empire and contributed much knowledge to the medical community there. He is one of the most well known physicians of that time, and is often seen as the “founding father” of ancient medicine along with Hippocrates (Jackson, 123).

Tools

Roman surgical tools were important to the success of the operation, which is why surgeons would often carry a personal set with them. Many tools were recovered from the towns of Pompeii and Herculaneum which were destroyed in 79 C.E. by the volcanic eruption of Mount Vesuvius which destroyed both towns. Tools ranged from being very precisely made, to roughly thrown together. They were usually made of copper bronze and brass, but sometimes iron when strength was required.

- Scalpel: The most common tool which was basically a sharp knife used to make incisions or cauterize. There were many different shapes for different incisions.

- Forceps: Used for grasping things which the surgeon otherwise couldn’t access or get a grip on. Bone doctors used special forceps for removing teeth.

- Probes: Basically an extension of the surgeons hand, probes were used to “probe” around inside the wound or site of operation.

- Needles: Often were used to cauterize wounds or incisions, but also during eye surgery.

Sources


Anesthesia

This type of surgery was used to remove damaged cranial bone, and also to relieve pain in the head as a therapeutic measure. One of the most dangerous operations, trephination was not normally practiced because of the risk of death. Special tools were used to make small holes around the damaged area, then a chisel was used to remove it. Another tool used was the crown trephine which was basically a circular saw that was operated by moving a bone with string back and forth.

Eye surgery was usually followed by failed treatment with ointments, as a last resort. A common problem was granular ophthalmia which leads to trichiasis, ingrowing eyelashes that irritate the eyes. Surgeons would use forceps to remove the hairs, then used hot needles to cauterize the wound. Needles were also used to remove or break up cataracts in the eyeball. This required the physician to be quick, steady and precise with his movements.

Bone Surgery

Modern Crown Trephine

Roman Surgeons seemed to have almost mastered fixing bone breaks, displacements and fractures through manipulation, reduction, extension, and splitting. Skeletons from Roman times are still around and have been examined to see the extent of their knowledge of bone healing. Some bones are flawlessly healed together, while others show poorly set fractures.

Dentistry

Doctors removed teeth that were decayed from rotting. They believed that teeth rotted because of tiny worms which ate away the enamel. Bone surgeons would scrape away the gum and shake the tooth until it came loose. Then they would grab it with forceps, taking care not to smash the tooth, causing further problems.

Galen, 2nd cent. C.E.

Celsus, 1st cent. C.E.

Hippocrates (Jackson, 125).