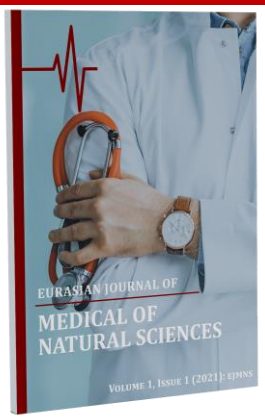
EURASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES
Innovative Academy Research Support Center
UIF = 8.3 | SJIF = 5.995 www.in-academy.uz



HISTORY OF ORIGIN AND STAGES OF DEVELOPMENT OF SURGICAL PRACTICE

Toirov Abdukhamid Suvonkulovich
Senior teacher of the department of Surgical diseases,
Samarkand State Medical University
https://www.doi.org/10.5281/zenodo.8058278

ARTICLE INFO

Received: 12th June 2023
Accepted: 18th June 2023
Online: 19h June 2023

KEY WORDS

Surgery, immobilization, treatment, hemostasis, endoscopy, ultrasound, pathological process.

ABSTRACT

This article discusses the history of surgical practice and its development stages. It contains information about the development of surgery from its initial appearance to the current stage, its methods and techniques.

INTRODUCTION

Surgery is one of the oldest branches of medicine. The oldest surgical method for which there is evidence is trepanation, in which a hole is drilled or scraped into the skull, thereby opening the dura mater in order to treat health problems associated with intracranial pressure and other diseases. For 6 thousand years BC. e. performed such an operation as the removal of stones from the bladder; in case of bone fractures, bandages were applied for immobilization.

Wine, honey and oil were used to treat wounds. Information about the state of medicine in the IV-V millennium BC. e. do not appear in chronicles. And only 1.5 thousand years BC. e. in ancient India began to develop surgery. Surgical instruments were invented (more than 100 items). At that time, such surgical interventions as nose plastic surgery, removal of foreign bodies, and methods for stopping bleeding (hemostasis) were being developed.

He studies diseases that require surgical operations and develops methods of operation. Since ancient times, people have helped themselves or each other by using simple methods such as applying pressure to the wound and sprinkling ash on the wound to stop the bleeding. Traces of skull trepanation and leg amputation were found in ancient excavations.

RESULTS AND DISCUSSION

Surgery was initially formed in countries with developed science and culture (Egypt, India, Greece, China, Byzantium). Mil. av. It is also noted that bloodletting and bladder stone removal operations were performed in the treatment of diseases. Hippocrates (460-377 BC) observed the primary and secondary healing of wounds, developed various dressing techniques, and used boiled rainwater to maintain cleanliness during the operation. The operation of rib resection used for drainage of the pleural space, which he developed, has not lost its importance even now.

In Rome, Celsus (Antillus) proposed the anatomy of some organs, signs of inflammation, ligature of vessels to stop bleeding during surgery, methods of treating festering wounds, and Galen suggested the use of silk for suturing wounds, the need to consider the anatomy and function of organs during surgical operations.

Abu Ali ibn Sina (980-1037) described the methods used in the treatment of surgical diseases in his book "Medical Laws"; he used opium and mandrake to the patient as anesthesia during the operation, and also knew well the techniques of removing stones from the kidney, identifying tumors and removing the tumor to healthy tissue, and other operations.

Microscope by A. Levenguk (1632-1723), V.K. The discovery of X-rays by X-rays played an important role in the diagnosis of diseases.

In 1731, the Academy of Surgeons was founded in Paris. After that, surgery began to develop as a science.

In general, surgery developed in 3 stages: 1) qad. from the times to the age of antiseptics (1860); 2) the period of antiseptics (1860-1890); 3) aseptic period - continues until now.

In the second half of the 19th century, the introduction of anesthesia, antiseptics, and aseptics led to positive achievements in the development of surgery. At the same time, large-scale operations on the stomach, intestines, lungs and other internal organs began to be successfully performed. In the 19th and 20th centuries, extensive experimental research conducted by surgeons from different countries made it possible to develop the most complex operations: removal of the stomach, intestine or part of the lung, sewing of veins and nerves, as well as the development of surgical methods and techniques for the treatment of broken bones, wounds, and burns. Branches of surgery have increased, and independent scientific and practical fields such as traumatology, orthopedics, urology, neurosurgery, children's surgery have emerged.

Today, the science of surgery is developing as a result of achievements in fields such as chemistry, physics, and molecular biology. Accordingly, work was carried out on prosthetics of heart valves and veins, organ and tissue transplantation, creation of artificial joints, creation of an artificial heart. Surgical treatment of myocardial infarction, microsurgery (restoration of a completely severed finger or creation of new blood flow in the small vessels of the heart), lasers, use of high oxygen pressure in special chambers, that is, hyperbaric oxygenation, creation of germ-free conditions in the treatment of wounded and burned patients, artificial and additional blood circulation and other new directions in surgery.

The formation of surgery in Uzbekistan is connected with the establishment of the department of surgery under the medical branch of Turkestan University in 1920. Later, surgical departments began to operate in Tashkent, Samarkand, Andijan, Bukhara Medical Institute, Tashkent Pediatric Medical Institute, as well as in the Tashkent medical training centers, the Tashkent branch of the All-Union Institute of Clinical and Experimental Surgery (now the Specialized Surgical Center named after V. Vahidov in 1977) . Training of doctors and research on various surgical problems are being carried out in these centers of science.

In the development of surgery in Uzbekistan, S.A. Masumov, O. O. Oripov, V.V. Vokhidov, M. Ashrafova, P.M. Nurmuhamedov, Sh.I. Karimov, D.S. Ghulomov, F.G. Nazirov, S. M.

Azamkhozhayev, S.A. Dolimov, L.D. Vasilenko, A.M. Gafurov, K.Kh. The services of Tahirov and others are of great importance.

The development of current science and technology, the development and implementation of new research and treatment methods (endoscopy, ultrasound, computer tomography, nuclear magnetic resonance tomography, laparoscopy, laser beams, etc.) have led to further development of surgery. In 1998, an emergency medical center and its branches and sub-branches in the regions are being established in Tashkent.

Surgeons conducting operations (in medicine) is the intervention of a surgeon in the disease process in tissues and organs. In this case, an operative wound is created (bloody operation), sometimes special mechanical methods are applied (bloodless operation, for example, putting a protruding bone, fixing broken bone pieces together). It is often done for treatment, and sometimes for diagnostic purposes (eg, biopsy, puncture, laparotomy).

A distinction is made between planned and non-delayed (immediate) operation. Before the planned operation, the patient is thoroughly examined and prepared for the operation (in case of fluid, gastric ulcer, cancer, chronic appendicitis, cataract). When the condition of the disease threatens the patient's life (perforation of stomach ulcer, compression of the hernia, twisting of the intestine, etc.), an urgent operation is performed.

Operation is divided into radical and palliative types. In Radical Surgery, the pathological process is eliminated (the disease center and even the whole organ is removed). The task of palliative surgery is to eliminate the symptoms of the disease caused by the pathological process.

According to the nature and purpose of the operation, they are divided into diagnostic, radical and palliative. Diagnostic operations allow the surgeon to make a more accurate diagnosis and are, in some cases, the only diagnostically reliable method, radical surgical interventions completely eliminate the pathological process, palliative ones alleviate the general condition of the patient for a short time.

CONCLUSION

According to the timing of the operation, emergency, urgent and planned operations are distinguished. Emergency operations require immediate execution (stop bleeding, tracheostomy, etc.). Urgent operations can be postponed while the diagnosis is being clarified and the patient is preparing for surgery. Planned operations are performed after a detailed examination of the patient and the necessary preparation for the operation.

Modern surgery is increasingly becoming reconstructive surgery, that is, aimed at restoring or replacing the affected organ, a vessel prosthesis, an artificial heart valve, strengthening the hernia ring with a synthetic mesh, etc., and minimally invasive, that is, aimed at minimizing the volume and area of intervention in the body -accesses, laparoscopic technique, X-ray endovascular surgery, as well as molecular surgery.

References:

1. Бабажанов А. С., Тоиров А. С., Ахмедов А. И. Гибридные технологии и экстракорпоральные методы сорбционной детоксикации (обзор литературы) //Academy. – 2020. – №. 4 (55). – С. 96-100.

2. Бабажанов А. С., Ахмедов А. И., Тоиров А. С. Современные методы лечения гнойного холангита и холемичекой интоксикации (обзор литературы) //Достижения науки и образования. – 2020. – №. 5 (59). – С. 69-75.
3. Бабажанов А. С. и др. Определение показаний к эндовазальной лазерной коагуляции (ЭВЛК) магистральных подкожных вен при варикозной болезни //Наука и мир. – 2016. – Т. 3. – №. 6. – С. 25-28.
4. Бабажанов А. С. и др. Сравнение эффективности эндовенозной лазерной коагуляции и традиционной комбинированной флебэктомии //Наука и мир. – 2017. – Т. 1. – №. 5. – С. 85-87.
5. Тухтаев Ж. К. и др. Сравнительная оценка лечения варикозной болезни нижних конечностей //ДОСТИЖЕНИЯ ВУЗОВСКОЙ НАУКИ 2019. – 2019. – С. 158-161.
6. Юсупов А. М. и др. Комбинированный метод хирургического лечения варикозной болезни нижних конечностей //Молодежь и медицинская наука в XXI веке. – 2017. – С. 391-392.
7. Бабажанов А. С. и др. СРАВНИТЕЛЬНОЙ АНАЛИЗ ЛЕЧЕНИЯ РЕЗУЛЬТАТОВ ЭНДОВАЗАЛЬНОЙ ЛАЗЕРНОЙ КОАГУЛЯЦИИ МАГИСТРАЛЬНЫХ ПОДКОЖНЫХ ВЕН ПРИ ВАРИКОЗНОЙ БОЛЕЗНИ //Достижения науки и образования. – 2021. – №. 3 (75). – С. 76-80.
8. Бабажанов А. С. и др. Выбор хирургической тактики лечения при язвенных гастродуоденальных кровотечениях //Наука и мир. – 2020. – Т. 2. – №. 4. – С. 62-64.
9. Бабажанов А. С. и др. Выявление факторов рецидива варикозной болезни //Re-health journal. – 2020. – №. 2-3 (6). – С. 130-133.
10. Бабажанов А. С. и др. Выбор методов хирургического лечения у больных с термическими ожогами //Science and World. – 2013. – С. 23.
11. Бабажанов А. С. и др. РЕЗУЛЬТАТЫ ЭФФЕКТИВНОСТИ ПРИМЕНЕНИЯ МАЛОИНВАЗИВНЫХ МЕТОДОВ ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ ОСТРОГО ХОЛЕЦИСТИТА У БОЛЬНЫХ ПОЖИЛОГО ВОЗРАСТА //Наука и Мир. – 2017. – Т. 1. – №. 5. – С. 82-84.
12. Тоиров А. С. и др. Причины возникновения рецидива варикозной болезни //SCIENCE AND WORLD. – 2013. – С. 88.
13. Алимов Ж. И., Тухтаев Ж. К., Тоиров А. С. ФЛЕБЭКТОМИЯ В ЛЕЧЕНИИ ВАРИКОТРОМБОФЛЕБИТА //Молодежь и медицинская наука в XXI веке. – 2017. – С. 348-349.
14. Тоиров А. С. и др. Тактика при желчнокаменной болезни с осложнением механической желтухи //Science and world. – 2013. – С. 62.