World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-39, October 2024
ISSN: 2749-3644

THE ROLE OF REMOTE DIAGNOSTICS IN MEDICINE.

D.Elmurotova
PhD, Tashkent medical academy, Tashkent Uzbekistan
F.Arzikulov.
Assistant of Tashkent medical academy,Tashkent Uzbekistan
Izzatullayev I
Student of Tashkent medical academy Tashkent Uzbekistan
Olimov A
Student of Tashkent medical academy Tashkent Uzbekistan
Abdurahmonov J
Student of Tashkent medical academy

Article history:

Received: July 26th 2024
Accepted: August 24th 2024

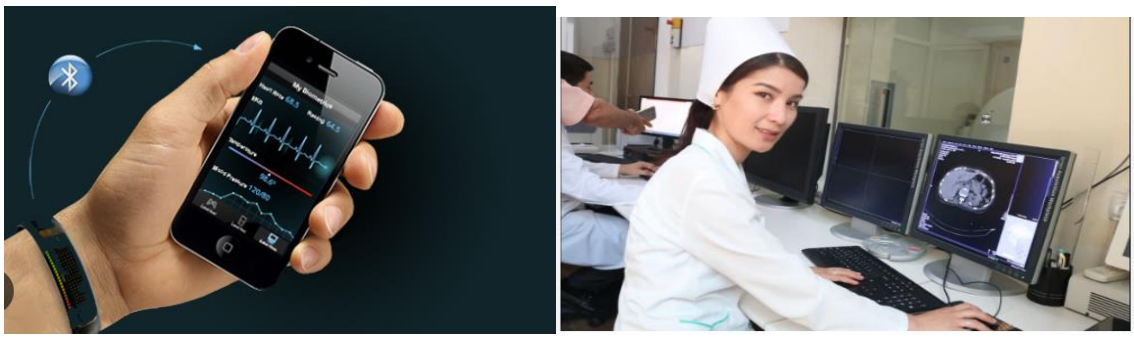
Abstract:

The work presents information about the technology of remote diagnostic systems, highlighting the stages of allowing you to identify various diseases and assess the patient's condition in advance without direct contact with the doctor. The principle and limitations of multichannel cardiography are looked at.

Keywords: Remote diagnostics, multichannel, cardiography, heart, neurology, coronary, cardiomyopathies, arter, cardiologist.

Remote diagnostics, intelligent monitoring and disease prediction systems are based on the use of machine learning algorithms and large-scale data analysis. They allow you to collect information about the state of the human body, analyze it and determine the relationship between various health indicators.

Remote diagnostic systems use a variety of data to determine the state of technology or human health.



Picture-1. Types of remote treatment

Some of this information may include:

•Measurement of physiological indicators such as body temperature, pulse, pressure and breathing;

* Results of examination of blood, urine and other biological materials;

* Images obtained using medical equipment such as X-ray and ultrasound machines;

• Equipment performance data such as temperature, pressure, speed and vibration;

• Information about hardware settings and parameters.

These data are processed and analyzed to identify potential problems or abnormalities. The results can be used to prevent equipment failure or to diagnose diseases.

Remote diagnostic systems allow you to identify various diseases and assess the patient's condition in advance without direct contact with the doctor.

Some diseases that can be detected using such systems include: 1. Heart disease: with remote diagnostic systems, it is possible to monitor the heart rhythm, measure blood pressure and detect cardiac dysfunction.

2. Respiratory diseases: remote diagnostic systems allow you to control respiratory activity and detect the presence of diseases such as asthma or chronic obstructive pulmonary disease.

3. Neurological disorders: with remote diagnostic systems, it is possible to assess the nervous system and determine the presence of neurological disorders such

World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-39, October 2024
ISSN: 2749-3644

as Parkinson's disease or epilepsy. 4. Dermatological diseases: remote diagnostic systems allow you to visually assess the condition of the skin and determine the presence of various dermatological problems, such as eczema or psoriasis.

5. Endocrine disorders: with remote diagnostic systems, it is possible to control hormone levels and detect the presence of endocrine disorders such as diabetes or hypothyroidism.

Picture-2. Types of sickness

However, it should be noted that remote diagnostic systems do not replace full medical advice and diagnostics. They serve as an auxiliary tool for pre-checking and monitoring the patient's condition. If any abnormalities are found, it is recommended to consult a doctor for a more accurate diagnosis and treatment.

Multichannel cardiography is a cardiac examination method that allows the electrical activity of the heart to be recorded at multiple points using multiple electrodes at the same time.

Picture-3. Exterior of electrocardiograph

Multichannel cardiography (MEKG) allows simultaneous recording of electrical activity of the heart at different points in the chest, allowing for a more complete picture of cardiac activity and detection of disorders that can be missed in a regular ECG. In addition, the Megg allows a detailed analysis of changes in the electrical activity of the heart during exercise or in the conditions of everyday life. In general, the Megg is a more accurate and informative method of examining the heart than the normal ECG.

Multichannel cardiography (ICC) is one of the most common methods of examining the heart. With its

World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-39, October 2024
ISSN: 2749-3644

help, many heart diseases can be detected, for example:• Koroner arter kasalligi (SAPR)
•Cardiac arrhythmias
• Cardiac conduction disorders
• Heart valve diseases
• Cardiomyopathies
* Congenital heart defects
ICCprovides a more accurate and detailed account of cardiac activity than simple single-channel cardiography.Inaddition, it can be used to control the treatment of heart disease and assess the effectiveness of therapy.The multichannelcardiography(ICC) procedure is performed using a special apparatus called a cardiograph.During the procedure, the patient is placed electrodes in the chest, which record the electrical activity of the heart. Then the patient is offered to lie on the couch, after which the car begins to register information about the activity of the heart within a few minutes. These data are then analyzed by a cardiologist to identify possible disturbances in cardiac activity. The multichannel cardiography procedure is safe, non-invasive and does not cause pain.
Before performing multichannel cardiography, the following restrictions should be taken into account for patients:
• Large meals should be avoided 2-3 hours before the study.
• It is not recommended to consume caffeine, alcohol and nicotine 12 hours before cardiography.
• All metal items such as jewelry, glasses, etc.must be removed before the study.
• During cardiography, the patient should be calm and calm, so exercise and stress should be avoided before the examination.
If the patient has a chronic illness or is taking medication, it is very important to inform the doctor who will do the cardiography.

REFERENCES.

1. Elmurotova D.B., GaibnazarovB.B., Cho'tpulatova M.B. Rahimberganova Z.M., Tibbiyot texnikasini o'rnatishda texnik xavfsizlik talablari // Меж. Научно-образовательный электронный журнал «Образование и наука в XXI веке» В.№24, Т.2, март 2022 С.1349-1353.
2. Salomov U.A., Elmurotova D.B., Meyliyev L.O. Technological process medicine // World Bulletin of Public Health. ISSN (E): 2749-3644, Impact Factor: 7.635, India.
3. Elmurotova D.B., Tashev B.J., Rakhimov I.T., Bozorov E.X., Mussayeva M.A. Gamma Therapeutic Devices // International journal of health systems and medical sciences, 2022-11-24, 1(5), P. 267-269.
4. Elmurotova D.B., Abdukaxxorova M.I., Raximbekov A.X. Turdiyeva S.Z. Rentgenologik tadqiqot usullari // Int. Conf. on Research in Sciences, Education and Humanities. Hosted from Basel, Switzerland, December 30th 2021. 2022. P. 60-62
5. Elmurotova D.B., Babajanov B.A., Jorayeva N.J., Sodiqov S.O. Tibbbiyot texnologiyasida axborot texnologiyalar // Development and innovations in science. Int. scientific-online conf., Netherlands, January 25, 2022. P.105-107 woconf.com
6. Элмуротова Д.Б., Ялгашева Э.Б., Эсонова М.Д., Жураева Н.Ж., Бозоров Э.Х. Гамма аппараты в медицине // «Biotexnologiyada ta'lim, fan va sanoat integratsiyasi» Res. ilmiy-texnikaviy anjumani maqolalar to'plam. Toshkent, 24-25.11.2022 С.394-397.
7. Элмуротова Д.Б., Зокирова Ф.О., Юсупова Н.С., Рахимберганова З.М., Бозоров Э. Х. Гамма-терапевтический аппарат для контактного облучения// «Biotexnologiyada ta'lim, fan va sanoat integratsiyasi» Respublika ilmiy-texnikaviy anjumani maqolalar to'plam. Toshkent, 24-25.11.2022 С.397-4-399.
8. Elmurotova D.B.,Nazirov R.M., Tashev B.J., Raximov I.T., Turdiyeva S.Z. Zamonaviy tibbiy axborot tizimlari// «Biotexnologiyada ta'lim, fan va sanoat integratsiyasi» Res. ilmiy-texnikaviy anjumani maqolalar to'plam. Toshkent, 24-25.11.2022 С.409-412.
9. Elmurotova D.B., Ismatova L.N, Xaitov F.N., Odilova N.J. Tubes for x-ray structure analysis // Eurasian Research Bulletin V.7, ISSN: 2795-7365 April, 2022 P. 69-72.
10. Elmurotova D.B., Yusupova N.S., Jo'raqulov Sh.R., Ixrorova S.I. Complex of High Quality Portable X-Ray Systems **//** Modern Journal of Social Sciences and Humanities ISSN: 2795-4846 V.7 (July-2022). P.1-4, Portugal.
11. Salomov U.A., Elmurotova D.B., Meyliyev L.O. Technological process medicine // World Bulletin of Public Health. ISSN (E): 2749-3644, Impact Factor: 7.635, India.
12. Elmurotova D.B., Tashev B.J. and all. Gamma Therapeutic Devices // Int. journal of health systems and medical sciences, 2022-11-24, 1(5), P. 267-269.
13. Elmurotova D.B., Mamashova N.T., Bozorov E.H., X-ray therapy and its applications // Journal of Academic Research and Trends in

World Bulletin of Public Health (WBPH)
Available Online at: https://www.scholarexpress.net
Volume-39, October 2024
ISSN: 2749-3644

Educational Sciences (JARTES) V 1, ISSUE 10 / ISSN 2181-2675. 2022, P 358-363. DOI: 10.5281/zenodo.7241942