BEKHTEREV and the disease of his name

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Abstract. The popular encyclopedia "Who's Who in Orthopedics" (by Seyd Behrooz MOSTOFI) contains short biographies of famous orthopedic traumatologists throughout the history of the development of traumatology and orthopedics in the world. The biographies are arranged in alphabetical order and begin with a description of the life of the well-known orthopedist Robert ADAMS (1791-1875), a professor at the University of Dublin who had scientific publications on rheumatoid arthritis. The encyclopedia has published biographies and photographs of 365 orthopedic traumatologists. From Russian scientists, the encyclopedia includes biographies of the genius Nikolai Ivanovich PIROGOV (1910-1881), Gabriel Abramovich ILIZAROV (1921-1992) and Vladimir Mikhailovich BEKHTEREV (1857-1927), who is not an orthopedic traumatologist, but. being an eminent neurologist and psychologist, he published in 1892 an article on ankylyzing spondylarthritis (AS). For some reason, this encyclopedia did not include the professor of orthopedics and trematology Konstantin Mitrofanovich SIVASH (1924-1989) - the inventor (1959) of the world's unique all-metal total hip joint endoprosthesis.

Keywords. Bekhterev Vladimir Mikhailovich, psychology, neurology, anclilizing spondioarthritis, Bekhterev-Marie-Strumpell disease.

Introduction. The literature quotes an excerpt from the letter of the genius physicist Isaac NEWTON to his friend, the outstanding inventor and founder of experimental physics, Robert Hooke (1676): "If I saw further than others, it was because I stood on the shoulders of giants." This is true in historical and moral terms, for science is not only a process of constant expansion and deepening of human knowledge about phenomena and objects, but also for understanding those who stood at the origins of a new direction and the latest open. Knowledge over time, of course, undergoes changes and even becomes obsolete, but moral criteria and personal qualities of the first and subsequent researchers remain unchanged in science and life. In this context, the biography, fate, aspirations and research of the outstanding scientist Vladimir Mikhailovich BEKHTEREV is of everlasting value for new researchers, regardless of their age, nationality, specialty and field of activity.

Bekhterev V.M. - **neuropathologist and neuropsychiatrist.** In the encyclopedia "Who's Who in Orthopedics" it is written that "V.M. Bekhterev owns over 500 works, among them: "Pathways of the spinal cord and brain", "Fundamentals of the doctrine of the functions of the brain", "Nervous diseases in isolated groups", "Objective psychology", "General diagnosis of diseases of the nervous system", "General foundations of human reflexology" and others.

There is no such area of neurology, which V.M.Bekhterev would not be engaged in. His numerous scientific works reflect many of the problems and achievements of neuroscience of that time. Starting from a morphological position, V.M.Bekhterev studied psychoneurology. Having completed a well-written study in human reflexology, the field of neuropsychiatry, he sought a model of the human personality in both normal and pathological manifestations. Shortly before his death, V.M. Bekhterev revised and republished his main anatomical work "Pathways of the spinal cord and brain", which became the main theoretical and clinical manual.

V.M. Bekhterev himself was engaged not only in neurology, psychiatry or reflexology. Firstly, he was a neuropsychiatrist in the broadest sense of the word, and secondly, he painted a clear picture of a multifaceted and at the same time integral human personality, combining the features of a world scientist and an outstanding public figure.

In 1892 he wrote an article about a disease that was later called "ankylosing spondylitis" (AS) or "Marie-Strumpell's disease". This is written in the said encyclopedia.

"Morbus Bechterew-Marie-Strumpell". Description history. Information about this deformation (disease), which constrains the movement, was known millions of years ago, because skeletons were found during archaeological excavations in ancient Egypt, Sudan, Cuba, Rome, Bulgaria, Tatarstan, not only in humans, but even in dinosaurs and other prehistoric animals. Skeletal changes similar to the anatomical changes in AS have been found in crocodile, tiger, bear, dog, monkey, and human remains. This disease was noticed by the brilliant ancient Roman Claudius Galenus (129-200 AD) - the author of the famous book "On the structure of the human body." Even earlier, the "father of medicine" - the ancient Greek physician Hippocrates (460 BC) sagely described this pathology as: "the vertebrae of the back and neck can be affected by pain that extends to the sacrum". And later in the Y century A.D. Caelius Aurelians described this ailment as "the patient is exhausted from back pain, moves slowly, and can only bend or stand with difficulty."

There are even religious parables for the healing of such patients. Saint Luke seemed to straighten a fully bent 18-year-old woman (Gospel of Luke. New Testament. Bible. Chapter 13. verse 10-13.). In the same chapter there is a mention of the fact that in one of the synagogues Jesus, seeing a crumpled woman, called her over and said to her: 'Woman! You are freed from your disease" (Luke 13:13). "He laid his hands on her, and she immediately straightened up and began to praise God." Oh, if only it would be so easy to cure sufferers with AS and other serious ailments! It is difficult to agree with these examples, because it is

possible that these bent over have banal sciatica and psychoneurotic status. Or maybe what you want is described as reality, because there is no documentation?

At the same time, we know that the first radiography in the world was recorded only in 1895 by Wilhelm Conrad Rontgen. Yes, and then there were no pharmacological (NSAIDs (non-steroidal anti-inflammatory drugs), analgesics, glucocorticoids, BAIDs (basic AID), GEBD (genetically engineered biological drugs: infliximb, etanercept, adalimumab, golimumab, certolizumauk, etc.) and non-pharmacological (balneotherapy, exercise therapy, psychotherapy) methods of treatment. And the history of joint replacement in patients with this pathology dates back only to 1891, when Dr. Themistocles GLUK from Germany made the first ivory implant for hip replacement, but more on that in another article.

Skeletal deformities similar to AS have been found in the pharaohs and the Medici family, although we know that clarification and differentiation of changes in bones, joints and ligaments of the skeleton is really not possible without modern MRI, CT, contrast and panoramic studies, 3D modeling, PET CT or PET MRI (positron emission tomography with CT or MRI), genetic, immunological, biochemical and clinical blood tests.

The most detailed first description of this disease is found in the Italian anatomist and surgeon of the Renaissance Realdo Colombo (1516-1559) (Realdo Colombo) in his famous treatise "On Anatomy" in 15 volumes. And the Irish doctor Bernard Connor (Bernard Connor, 1666-1698)) described the fusion of the vertebrae and ossification of the ligaments, reminiscent of the "bamboo stick" ("arshin swallowed") by the French doctor Pierre Marie (1898), although before them AS was described by English doctors: D.Travers (1824), P.M. Lions (1831), B. Brodie (1850), J. Peget (1877), C. Fagge (1879), E. Bradford (1833), H.H. Glutton (1883), N. Davis-Colley (1885), D. Teker (XIX century), etc.

The report of the Russian neurologist V.M. Bekhterev (1883) by the German neurologist A. Strumpel (1897), the French neurologist P. Marie (1898) and B. Connor in XU11 are considered the first clinical descriptions of AS. Therefore, this ailment was named in Russia, Europe and in a number of other countries as Bekhterev-Marie-Strumpel (Morbus Bechterew-Marie-Strumpel), Maria-Strumpel or as Bekhterev-Marie-Strumpel disease. (Morbus Marie-Strumpell,s.) By the way, Vladimir Mikhailovich Bekhterev has an unconditional priority in the description of fixed kyphosis of the thoracic spine, accompanied by neurological disorders caused by damage to the membranes and roots of the spinal cord. Academician Bekhterev V.M. drew the attention of doctors in different countries to the problem of diseases accompanied by ankylization of the spine. The name "Bekhterev's disease" with AS is legally used nowadays not only in Russia.

Bekhterev-Marie-Strumpel disease. "I have repeatedly had the opportunity to observe a painful lesion with the characteristic signs indicated by Strumpel and Marie, which, however, I always distinguished from the lesion that I described under the name of 'stiffness with curvature of the spinal column.' (V.M. Bekhterev

"On ankylyzing inflammation of the spine and large joints of the extremities." Journal "Review of Psychiatry, Neurology and Experimental Psychology". 1899).

This was during the work of V.M. Bekhterev professor of psychiatry at Kazan University. This ailment (AS) is known to us from school years and from the novel by Nikolai Ostrovsky "How the Steel Was Tempered". The writer himself suffered from spondyloarthritis and "rewarded" the protagonist of the work of Pavel Korchagin ("cannot get up in the morning, gradually immobilizes, crumples, goes blind, heart and kidney problems begin"). In this disease, the spine, joints and sacroiliac joints are calcified, growing together and gradually become immobile due to chronic inflammatory processes in the ligaments and joints of the spine and the sacroiliac joints. "I am inclined to think that both curvature of the spine and stiffness in this case are not primary... Curvature of the spine, flattening of the chest and chest failure can be made dependent on the paretic state of the muscles supporting the spine due to degeneration of the spinal roots".

Subsequently, the views of V.M. Bekhterev at AS specified: "One can assume. That we had an independently developed diffuse chronic process in the areas adjacent to the hard shell of the spinal cord, in all likelihood, chronic inflammation of the surrounding tissue and outer layers of the hard shell itself, which, on the one hand, caused extensive dense adhesions of the hard shell with the bodies along the bells and ligaments, and on the other hand, squeezing the emerging roots. It is possible, of course, that in the course of time a lesion of the spinal cord itself may join".

And five years later (1887) V.M. Bekhterev came to the conclusion that "this description cannot be considered complete, but in some particulars it does not fully correspond to the symptoms of the lesion that I described under the title" stiffness of the spine... is essentially the same affliction". This is the opinion of a real scientist who does not consider himself not to be gutted. And in 1889 the opinion of V.M. Bekhterev after sectional research returned to the original: "Some of the vertebrae in the upper thoracic part are fused tightly by the anterior parts of their bodies, others are limitedly mobile. An autopsy did not reveal any signs of disease of the articular parts of the spine. At autopsy, no mechanisms were found that lead to the roots being directly compressed due to a decrease in the size of the intervertebral foramen. Changes come to light primarily in the posterior and anterior roots, more sharply in the upper half of the thoracic region and in the lower part of the cervical. The posterior roots are in places reborn almost entirely, there is a degeneration of fibers, corruption of neurology and connective tissue. In the spinal cord, there is also a degeneration in the same areas of the spinal cord at the indicated level, it looks somewhat thickened with a noticeable development of blood vessels. Clear changes in the cells of the intervertebral nodes: the phenomena of degeneration and simple atrophy".

In his dissertation, Golant Z.Ya. back in 1913, he emphasized that with AS, patients develop "excruciating hyperesthesia, reaching the point that patients cannot stand the touch of underwear." The manifestations of a wide variety of symptoms of discomfort are possible, which worsen the quality of life of patients with AS.

Researchers' interest in AS (M 45.0) is growing. And already 22 forms of AS are distinguished, National, European and International scientific forums on AS are convened, the Rome (1961) and New York (1966, 1984) criteria for the study, diagnosis, classification, treatment and monitoring of patients with AS have been created. Seronegative AS has already been identified, the ASAS - Assessment in Ankilosing Snondylitis working group has been created at the European Antirheumatic League (EULAR), which coordinates the development of a new classification, diagnostic methods, monitoring and treatment of patients with spondyloarthritis. In Russia, back in 2013, a group of ESA experts on SA was formed at the Association of Rheumatologists of Russia (the first head of the ESA was Professor Elza Romanovna Agababova).

There are no in-depth studies in the literature on the psychological status of patients with AS, although V.M. Bekhterev was an outstanding psychologist.

About Bekhterev V.M. "To tell about the life of Bekhterev is to tell an epic about a powerful hero who, with the power of titan, created a huge, powerful and beautiful temple of that part of Eastern European science, where for the first time a complete comprehensive study of the human personality in the manifestations of his individual and social life began" (K.I. Platonov).

"V.M. Bekhterev was a creative personality with a huge, almost legendary erudition, broad outlook and diverse interests" (professor of psychology at MSU, L.S. Vytogotsky).

"Only two people know perfectly the anatomy of the brain - this is God and Bekhterev" (professor of anatomy at the University of Berlin Friedrich Kopsha.

Professor M.V. Bekhterev by various scientists in 1912, 1914 and 1925 several times for the Nobel Prize, but, unfortunately, they did not manage to get it.

"We are seeing off to the grave a prominent scientist whose scientific merits are known far beyond the borders of our country. These merits are immeasurable. Even in ancient times, when the area of nervous activity was mysterious and dark. Academician Bekhterev opened the door to this dark area with his scientific key, shedding bright rays of scientific light on it. Even then, Bekhterev laid the foundations of reflexology, that is, the doctrine that is closest to materialism and therefore is the only scientific understanding of mental life." (N.A.Semashko, Minister of Health of the USSR).

Statements by V.M. Bekhterev. "Good psychologists can only be those who know how to observe themselves well"

"If the patient does not feel better and does not feel better afterwards, then you're no doctor"

"Let's drink to those blissful times when scientists will be able to do the same science"

"Every society in terms of ideas lags behind scientists for several generations"

"Moral ugliness and criminality are the result of a lack of upbringing and depravity from an early age"

"You cannot be the leader of the people without embodying their dreams"

"Aren't our prisons overcrowded with persons who are only guilty of the fact that, wishing well for their homeland, they were heralds of new ideas and other orders in our country?" (September 1905 at the congress of psychiatrists in Kiev)

"At the turning point of history, one cannot stand at a crossroads and wait, one needs the will to act, to build and constructive work; and for us, scientists, who have always devoted their strength to efforts to serve humanity, there should be no hesitation" (1919)

"I was not at all envious of those who preferred abroad to their home, although I must say that together with my family I had to try in times of famine only oats and rusty herring or vobla" (V.M. Bekhterev. "Autobiography")

"When a country of high material culture becomes infected with the Middle Ages, as we see in America (USA-M.A.), which boasts of its technical achievements and freedoms, then this is already a serious danger that can infect other countries, a danger that needs to be looked directly into eyes and which must be warned" (V.M. Bekhterev. "Struggle for Science")

"Empress Alexandra Feodorovna – is but an ordinary pretty hysterical woman"

"Not a single sigh and not a single smile disappears without a trace"

"Drunkenness is an age-old evil, it has taken deep roots in our everyday life and has given rise to a whole system of wild drinking habits. These customs require drinking and treating in any case... alcohol is poison even in small doses...". "The economic damage caused to the country by the consumption of alcohol is so great that with the elimination of it, public finances will only benefit, not to mention the country's annual savings of 1 billion rubles, which is higher than the amount consumed by the population" (V.M. Bekhterev, Director of the Anti-Alcohol Clinical Institute"(1912).

"Suicides increase with the increase in human suffering and decrease with the rise in the material and moral well-being of society." (V.M. Bekhterev. 1908).

The Bekhterev family. Vladimir Mikhailovich Bekhterev is a physiologist, neuropathologist, reflexologist, psychologist, lieutenant general of the medical service of the Russian Imperial Army, academician, founder of a psychophysiological laboratory in Kazan, founder of the Kazan society of neuropathologists and psychiatrists, founder of the neuropathological institute in St. Petersburg, headed the Department of Nervous and Mental Diseases of Mediko - Surgical Academy, founded the journal "Neurological Bulletin", was the chairman of the Russian Society of Normal and Pathological Psychology, a member of the editorial committee of the multivolume manual "International Treatise on Pathological Psychology". In 1926 he married a second marriage to Berta Yakovlevna Gurzhi-Are (Latvian), who was shot on December 15, 1937. He himself died suddenly on December 24, 1927, and Bekhterev's brain was preserved in the "pantheon of the brain of great people."

There is information that the death of Bekhterev, according to the historian R.A. Medvedev, allegedly connected with the fact that after consultation with J.V. Stalin's professor inadvertently said that Stalin suffered from paranoia. And in "Literaturnaya Gazeta" (September 2, 1988) in the article "The Last Diagnosis" O. Moroz writes that the director of the neuropsychiatric institute V.M. Bekhterev (founded in 1908 at the request of V.M.Bekhterev himself) received a telegram to come to the Kremlin's Medical Directorate upon arrival in Moscow. On the same day (December 27, 1927), the Congress of Psychiatrists and Neuropaths of the Soviet Union opened. And when one of the colleagues inquired about the reasons for the academician's lateness for the meeting, "Bekhterev answered irritably:" I watched one withered paranoid. " Someone reported this, and the fate of Bekhterev was a foregone conclusion: he soon died of poisoning.

However, the newspaper "Argumenty i Fakty" (September 1995, No. 39-780) published an interview with Academician Natalya Petrovna Bekhtereva, granddaughter of V.M. Bekhterev. "It was a tendency to declare Stalin crazy, including using the alleged statement of my grandfather, but there was no statement, otherwise we would have known. Grandpa was indeed poisoned, but because of something else. And someone needed this version. They started to put pressure on me, and I had to confirm that it was so. I was told that they would publish what Bekhterev was a brave man and how he died, boldly performing his medical duty. What is the doctor's duty? He was an excellent doctor, how could he come out from any patient and say that he is paranoid? He couldn't do it."

First wife - N.P. Bazilevskaya gave birth to 6 children for V.M. Bekhterev. The second son of Bekhterev V.M., Pyotr Vladmirovich Bekhterve, was arrested on September 22 and shot dead on February 23, 1938, and his wife, a doctor, Zinaida, was sentenced to 68 years in the Gulag as the wife of an "enemy of the people."

Pyotr Vladimirovich Bekhterev was a talented engineer and inventor, had patents, worked as chief designer of Ostekhbyuro. Together with many other employees of the Ostekhbyuro, on February 23, 1938, he was found guilty under the ill-fated article 58 of the Criminal Code of the RSFSR, and on the same day he was shot by the decision of the Military Collegium of the Supreme Court of the USSR. Rehabilitated in 1956. P.V. Bekhterev's wife was also repressed and was serving time in the Mordovian GULAG camp. Their daughter is Natalia.

Bekhtereva Natalya Petrovna, an outstanding neurophysiologist, academician of the Academy of Sciences of the USSR, was brought up with her brother in an orphanage, for she was listed as the daughter of an "enemy of the people." Subsequently, she headed the "Institute of the Human Brain of the Russian Academy of Sciences", was elected vice-president of the International Union of Physiological Sciences, vice-president of the International Organization for Psychophysiology, editor-in-chief of Human Physiology and International Journal of Psychophysiology. Truly, human destinies are inscrutable.

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