HENRY IVANOVICH TURNER – FOUNDER OF PEDIATRIC ORTHOPEDICS IN RUSSIA

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This study presents the organizational, clinical, and scientific activities of Henry Turner, the founder of pediatric orthopedics. In 1910, Henry Turner presented a report to the All-Russian Congress about the “Basic principles of care for cripples, which are subject to obligatory care on the part of the state.” He pointed out the deficits in the activities of charitable shelters, where there was neither treatment nor education, and he advocated for main organizational principles for institutions for crippled children.

Counseling and medical aid for children in the “Shelter for cripples and paralytics,” organized under the leadership of Henry Turner, facilitated the conversion of the shelter into an “Institute for vocational rehabilitation of physically handicapped children,” with 200 beds, in 1932. In connection with the 50th anniversary of the scientific and medical work of Professor Henry Turner, the Institute was named after him. The plight of pediatric patients was the subject of his constant care and attention; it was his lifework. The Institute's staff continue Henry Turner's vision of “orthopedics of the soul,” and not only treat but also teach and nurture children, to help form their personalities and to give them a joy and sense of life.

Keywords: Henry Ivanovich Turner, pediatric orthopedics, Turner Institute for Children's Orthopedics.

The year 2016 marks 75 years since the death of Professor Henry Ivanovich Turner, the outstanding scientist and clinician, one of the founders of national orthopedic science, Head of the Department in the Medical and Surgical Academy of St. Petersburg, and the organizer of the first orthopedic clinic in Russia. The orthopedists of Russia regard professor Turner with reverence as the founder of pediatric orthopedics and appreciate his contribution to the establishment and development of the Scientific and Research Institute for Children's Orthopedics, which has proudly borne his name for over 80 years.

During the early twentieth century, increasing attention in the Russian public consciousness was drawn to the fate of underprivileged and sick children. Children with severe deformities joined the ranks of the poor, and gained meager earnings to prevent the child and his family from starving to death. Children grew up in poverty, homeless, with a lack of parental care, and no basic medical care, and thus, failed to develop their mental abilities.

In 1890, a Petrovskoe charitable society for the Care of Poor and Sick Children called Blue Cross founded the Asylum for Crippled and Paraplegic People. The 20-bed Asylum had been a wooden house on Lahtinskaya Street, building No. 12, on the Petrograd side in St. Petersburg. The Asylum had been under the patronage of the Grand Duchess Elizabeth Mavrikievna, wife of the Grand Duke Konstantin Konstantinovich Romanov. Many Russian public figures had helped raise funds for the Asylum, and its first guardian had been E. S. Kokoshkina. A number of pupils were severely ill. The Blue Cross society had little funds, and could only provide children with housing, clothing, and food. The first years of the asylum had no medical leadership [1].

In 1904, Henry Ivanovich Turner, Professor at the Medical and Surgical Academy, was asked to organize medical care at the Asylum. He combined scientific, clinical, and pedagogical work in the field of orthopedics and traumatology,
social objectives. With his participation, the first orthopedic clinic in Russia was opened in the Medical and Surgical Academy, which was also named after him.

Professor Turner wrote, “I willingly adopted the proposal to participate in the work of the Asylum, with full consciousness of usefulness required in my activities by the Institute, the foundation of which I witnessed with my own eyes and used my assistance in developing its plans.” [2]. He examined the children of the Asylum and selected patients for surgical interventions, which were performed in the orthopedic clinic of the Academy.

Professor Turner, as a citizen and patriot of Russia, deeply embraced the problem of sick children. It became the subject of his constant care and attention: his life’s work. He wrote, “[p]eople, who from birth or due to unfortunate accidents and diseases that struck their nerves, muscles, bones, and joints are unable to work and sometimes even to move or to eat without assistance…are christened with the sad name of crippled people.” “The visual impression produced on indifferent passersby by the disfigured limbs of members of the crippled beggar is strong enough…and throwing a coin is a means of temporarily calming their worried nerves” [3].

Professor Turner carefully studied the experience of Europe and America on the organization of social and medical care for the same cohort of patients. In 1910, he presented a report to the All-Russian Congress about the “basic principles of care for cripples, which are subject to obligatory care on the part of the state.” [3]. He noted the defects in the activities of asylums, which turn into a storage yard for disadvantaged children with a lack of treatment and training of inmates. He formulated the organizational principles of institutes for crippled children, “Relief of disability and spiritual development, and the combination of medical care with education.” From the rostrum of the All-Russia Congress, he spoke of the fact that repairing disfigurement in children should not depend only on private charity, but should be a state matter [3]. In the same report, he pointed out groups of patients with similar congenital or acquired pathologies who required orthopedic care. In his overview, he made a list of the different varieties of crippled children: “malformations with severe disfigurement of the individual parts of the skeleton, an acute disease of the spinal cord in early childhood, children with rickets, severe disfigurement of the limbs and trunk by age 16 years which is the period of greatest growth, tuberculosis of the spine and joints, central nervous disease, and convulsions, and different parts of the body affected by…fractures, frostbite, burns, and different inflammatory processes.” He proposed a method of medical care for each group of patients. New prospects emerged for disadvantaged children. Treatment “corrected physical limitations of crippled children, helped crawling children to rise on legs, and brought them closer to a normal life with all its joys and full of attitude.”

It should be noted that Professor Turner considered it necessary to isolate children with tuberculosis of the bones, which was duly implemented. In 1910, a sanatorium for patients with bone tuberculosis in Anapa was founded with his participation, together with A. K. Schenck, assistant at the Department of Orthopedics; climatic treatment was also developed there [4].

After the Revolution, the Asylum was provided with a means of subsistence by the State and was converted into a Medical and Educational “Institute for the Rehabilitation of Physically Handicapped Children.” The scientific adviser of this Institute, Professor Turner, enjoyed the respect and support of Heads of Health authorities in Petrograd; his proposals for the organization of care for children were implemented. In an autobiographical sketch, he wrote, “[f]rom the sphere of my passion in this field of society, I can’t not mention my works to the benefit of crippled children. The ‘Asylum for Crippled People,’ which originated many years ago with my active participation, has now blossomed in the form of the Institute for Physically Handicapped Children, having the support of Government” [5].

The institute expanded territorially. It was located in a six-story stone building on Lahtinskaya Street, where they were able to accommodate classes and workshops, with equipment for children’s vocational training for blue-collar jobs. Later, the institute had a surgical hospital with operating and dressing room, gym, and outpatient clinic with devices for physical therapy. “Orthopedics has generously extended a helping hand to the vast world of crippled people,
restoring a human shape for some, and restoring lost functions for others,” Turner said.

Followers of Professor Turner, employees of the Department and Clinic of Orthopedics, as well as talented doctors who had become major scientists and managers working under his guidance, had jobs in the “Institute for Rehabilitation.” Professors E. Y. Osten-Sacken, C. A. Novotelnov, A. A. Kozlovsky, Z. A. Lyandres, and D. A. Novozhilov were among them. For many years, the Institute Director, N. I. Shnirman implemented the ideas of Professor Turner.

The institute has developed rapidly and has evolved from a purely practical into both a scientific and practical concern [4]. In 1932, a modest Institute for physically handicapped children was reorganized into the “Institute for the Rehabilitation of Physically Handicapped Children,” with 200 beds by the order of the Leningrad Government. In honor of the 50th anniversary of the scientific and medical activities of Professor Turner, the Institute was named after him. “In consideration of my past work, you have given me honor in the allocation of my name to the Institute. This extraordinary honor was the culmination of over 40 years of my activities in the institute,” said Professor Turner [2]. In 1933, on the orders of the People's Committee on Health of RSFSR, the Institute received the status of an Institute with Republican subordination. Eventually, it became the organizational and methodical, medical and research center of pediatric orthopedics and traumatology in Russia.

At the Institute, Professor Turner’s ideas were consistently embodied. “The Turner Institute, housing a large group of physically disabled children with poor general health, should have... space. Among forests, fields, orchards, gardens, and near water, they have to be close to nature. Air and light should be abundant in their classrooms and bedrooms.” (Turner, 1933) Students were taken to the cottage in Tolmachevo. Professor Turner initiated a combination of treatment for unfortunate children, which consisted in proper upbringing, education, professional development, and professional counseling. “Orthopedics of the soul,” “Orthopedics of personality”: no one has ever spoken such wonderful words in relation to children with disabilities and to children with congenital malformations [6]. Henry Ivanovich wrote that, “the physical deprivation of children is complicated by spiritual starvation, as disfigurement does not allow for school attendance. Mental abilities of most crippled people are at exceptionally high levels as if in compensation for their physical ugliness.” And at the Institute, lessons in general subjects were conducted, as well as lessons in music, singing, drawing, horticulture, and drama, all of which elevate the soul and expand the idea of beauty. Memories of the leaders of these classes were preserved. It is said that Professor Turner personally interviewed each one of them, and explained their tasks. Friends of the Institute included the Puppet Theatre team, headed by Artistic Director E.S. Demmeni. At the request of Professor Turner, the actors conducted field performances in the wards of the Institute for bedridden patients. The friendship was mutual. The foyer of the Marionette Theatre was decorated with a wooden table made by children in workshops of the Institute [4]. One of the patients wrote touching poems about his favorite doctor. Professor Turner allocated a poetic line from his poem, “the hated word 'crippled' was replaced by the word 'man,'” and he was proud of such attention given to his work.

The year 2016 marks 126 years since the founding of the Asylum and 84 years of activity of the Scientific and Research Children's Orthopedic Institute named after Professor Turner. Today, the Institute is the largest center for the treatment of congenital and acquired pathology of the musculoskeletal system in children, and is a scientific research center of pediatric orthopedics in Russia and Europe. The Institute develops new methods and improves existing methods of orthopedic treatment for children. Within its walls is a staff of scientists and physicians of the highest caliber, using the latest advanced technologies for diagnostics, treatment and rehabilitation. Along with clinical and scientific achievements, the Turner Institute is known in our country and abroad for having a humane approach toward patients [6].

The Institute successfully continues the legacy of Professor Turner and realized his dreams of two parallel processes: orthopedic reconstruction or restoration of lost functions and character education; that is, “orthopedics of the soul.” Professor Turner wanted the building of the Institute to be located in a suburban area, because fresh air promotes the good health of impaired children. In 1967, the Turner Institute moved to Pushkin, with 400 additional beds [7]. He spoke about the high level of
mental abilities of children with physical disabilities. The remedial secondary school works closely with the medical staff of the Institute. Teachers and educators of the pedagogical part of the Institute form the character of patients, eliminate their sense of inferiority owing to their anatomical and physical disabilities, and teach them skills that help them live and work among healthy people. The school follows the fate of former patients, conducts the professional orientation of adolescents. The Institute is proud when its former students receive education at schools, colleges, and Institutes, create families, and find their rightful place in life [6].

“The work, especially in the care for crippled people, is so great that it deserves special attention from the leaders of the charity. It is desirable that both governmental and public authorities participate,” wrote Professor Turner in 1910 [3]. Today, there is a society called “Friends of the Turner Institute” who, by their voluntary donations, participate in the noble work of helping children with disabilities, and children with anatomical and functional impairments. To improve the conditions of patients’ stay in hospital, sponsors helped repair the kitchens, and renovate the clinical departments in accordance with modern requirements. Sponsorship for the Institute is provided by RAO “Russian Railways,” the Association of Banks, the brewing company “Baltika,” and people of business, culture, and art. Buses especially equipped for the transportation of children in wheelchairs donated by the company Spread your Wings, allowed the transportation of patients in the scenic areas surrounding Pushkin and Pavlovsk, to deliver them for sightseeing to the Tsarskoye Selo Palace, to visit the Hermitage, to go to theaters and concert halls. Actors from the Academic and Children’s theaters of St. Petersburg, as well as circus performers, visit the children.

The covenant of Professor Turner’s “orthopedics of the soul” is to develop the internal dignity of the child, to help the formation of his personality with all its features, and to give the child a sense of joy in life. All these tasks are performed by the staff of the Institute.

There is a centuries-old tradition in medicine to honor teachers. The staff of the Institute regards Henry Ivanovich Turner with reverence as a scientist and public figure, who became the founder of pediatric orthopedics in Russia. We are proud of the history of our Institute. Preserving its traditions is our duty to future generations of children’s orthopedists.

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**References**


В статье представлена организационная, клиническая и научная деятельность Г.И. Турнера как основоположника специальности «детская ортопедия». Г.И. Турнер в 1910 году сделал доклад на всероссийском съезде «Основные начала призрения калек… которые подлежат обязательному призрению со стороны государства». Он указал на дефекты в деятельности благотворительных приютов, где нет лечения и обучения воспитанников, и сформулировал организационные основы учреждений для увечных детей. Консультативная и медицинская помощь детям в Приюте для калек и паралимников, организованная под руководством Г.И. Турнера, позволила преобразовать приют в Учреждение для восстановления трудоспособности, а затем, в 1932 году, в Институт восстановления трудоспособности физически дефективных детей на 200 коек. В связи с 50-летием научно-врачебной деятельности профессора Г.И. Турнера институту было присвоено его имя. Проблема помощи больным детям стала предметом постоянной заботы и внимания Генриха Ивановича, делом всей его жизни. Не только лечить, но и учить и развивать ребенка, помогать формированию его личности, дарить ребенку радостное ощущение жизни — это завет Г.И. Турнера об «ортопедии души», который выполняет коллектив института.

Ключевые слова: Г.И. Турнер, детская ортопедия, детский ортопедический институт им. Г.И. Турнера.

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