CURRENT INPATIENT TECHNOLOGY IN THE SUCCESSFUL OPERATION OF CHILD OUTPATIENT SURGERY CENTERS, TRAUMA-ORTHOPEDICS

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ABSTRACT
In this paper we present the scientific and organizational concept of the children’s outpatient surgery centers operating in the N.F. Filatov Child Clinical Hospital № 13 in Moscow since 1992. The Center includes: Surgical hospital one day (pillar), consultative-diagnostic department, outpatient department of orthopedics department treatment of benign tumors, uroandrologichesky module. In accordance with the directions of the Centre’s main divisions flows of patients with the following disorders: Routine surgical pathology, pathology of the musculoskeletal system, benign tumors and scarring of the skin and soft tissue purulent-inflammatory diseases, diseases of the reproductive organs (uroandrologiya). In medical-diagnostic process, we distinguish three phases: pre-hospital, hospital and post-hospital. Bandwidth Branch hospital stay is currently about 2,300 patients a year, performed more than 2,000 surgical procedures performed about 5000 consultations. Formation of patient flows for outpatient or inpatient treatment occurs in the primary treatment of patients. The department advises employees Departments of Pediatric Surgery RNRMU of N.I. Pirogov Hospital and doctors. In the year a total of about 20,000 held consultations. Important section of consultative and diagnostic services, as is the aftercare and follow-up of the operated patients. A multidisciplinary approach reveals not only the main cause of the disorder, but also to develop a reasonable treatment option pathogenesis. The ultimate goal of the treatment program is the social department and functional rehabilitation of the patient. On subsequent follow-up of 18 years. Hospital-complex is a scientific and educational base RSRMU of N.I. Pirogov where trained senior students, interns and residents. Specialized pediatric surgeons, urologists, andrology, orthopedics, traumatology. Total number of students of five hundred people. Past experience has been successfully applied in many areas, including on the basis of departmental medical facilities.

KEYWORDS — Outpatient Surgery Center, inpatient technology, pediatric surgery, outpatient orthopedics.

One of the urgent problems of modern pediatric surgery is the organization of high quality care for children in an outpatient setting. Our more than 25 years of experience in the development of ambulatory surgery Filatov’s hospital showed that the most appropriate structure swarm providing outpatient surgical intensification by power is an outpatient surgery center (OSC) with day surgery hospital, where you can perform many types of surgical benefits including the operation of medium difficulty. The main tasks of OSC, you can specify following: early detection and treatment of patients with surgical diseases and orthopedic pathology, development and introduction of new methods of treatment of, and studying the immediate and long-term results. Thus, OSC should be
considered as therapeutic and preventive unit consisting of a multidisciplinary treatment facility designed to assist surgical patients in an outpatient setting.

Nosological framework defining priority for ambulatory surgical pathology; it should be noted two possible treatment options: a full and complete partial landmark. The first option is a radical surgical treatment within the outpatient management of the patient, including all the necessary manipulations which result in the recovery of the patient and its removal from the dispensary. The second option involves landmark outpatient aftercare as stationary after surgery, and between hospitalizations with prolonged multistage embodiment, correction of pathological states. This group brings together patients with hospital surgical clinic outpatient surgery center and orthopedics hospital-based modern technology. For both groups of patients is an important step in defining the scope of treatment, and if the first group can be guided by a clear sequence of actions, in the second group have to make decisions on the actual condition of the patient at the time of inspection.

In this paper we present the scientific and organizational concept of the children’s outpatient surgery centers operating in the Children’s City Clinical Hospital № 13. NF Filatov Moscow since 1992. The Center includes:

- Surgical hospital one day (pillar)
- Consultation and diagnostic department
- Branch outpatient orthopedics
- Separate treatment of benign tumors
- Uroandrological module

In accordance with the directions of the Centre’s main divisions flows of patients with the following disorders:

1. Routine surgical pathology
2. Pathology of the musculoskeletal system
3. Benign tumors and scarring of the skin and soft tissues
4. Purulent-inflammatory diseases
5. Diseases of the reproductive organs (uroandrologiya)

All surgical procedures are performed in the hospital one day, which was organized in our hospital in January 1985 and was the first such institution in the USSR children. The Department of hospitalized children with the following diseases: the anterior abdominal wall hernia, hydrocele and cysts egg shells and spermatic cord, phimosis, cryptorchism, orthopedic pathology: hip dysplasia of varying severity, congenital clubfoot-syndromic concomitant orthopedic pathology, as well as soft tissue benign small sizes. The main stream (59%) were patients with pathology of the vaginal process of the peritoneum.

In medical-diagnostic process, we distinguish three phases: pre-hospital, hospital and post-hospital.

A crucial point in the prehospital phase is the correct selection of patients, which is carried out at a consultative reception. Developed a special algorithm for selection of patients for surgical treatment at the Children’s Hospital Surgical night stay. The algorithm provides for the evaluation of psycho-emotional status of parents and physical condition of the patient. Based on the correct selection of about 95% of the children of the number who applied, were successfully operated on an outpatient basis. The rest was recommended treatment in an elective surgery hospital.

Bandwidth department is currently about 2,300 patients a year, performed more than 2,000 surgical procedures performed about 5000 consultations.

Child’s stay in the hospital one day does not exceed 3.5 hours, during which time he gets the entire spectrum of diagnostic and treatment facilities, including hospitalization, inspection, operation, inspection and postoperative discharge. Further observation of the patient is carried out on post-hospital stage. Parents are given the necessary recommendations for care. On the 1st postoperative day children are invited to re-examine, in which parents receive recommendations for the future. In the last 15 years, we have completely abandoned the removal of sutures, as use intradermal cosmetic suture absorbable material (polyglycolide 4/0). If the patient needs further observation, we spend it yourself. Thus, a child undergoing treatment at a surgical hospital one day, gets the whole range of therapeutic and diagnostic activities, from establishing a correct diagnosis until complete recovery, including surgery.

Also, in an outpatient surgery center treats children with congenital fistulas pararectal. The basis of treatment is sclerotherapy technique. Sclerotherapy produce 1 times a day, every day, regardless of the period of existence of the fistula and the presence of purulent discharge. The process of sticking walls fistula is sufficiently fast and ends substantially between 8 - 15 administration (87% of patients). In 13 % of patients to eliminate fistula requires from 16 to 22 daily injections of 10 % alcohol solution of iodine.

Formation of patient flows for outpatient or inpatient treatment occurs in the primary treatment of patients. The department advises employees Departments of Pediatric Surgery NNRMU of N.I. Pirogov Hospital and doctors. Consultations are held on the following areas:

1. Urology-Andrology
2. Proctology
3. Plastic and Vascular Surgery
4. Thoracic Surgery
5. Neonatal surgery
6. Traumatology

Held every year around 20,000 consultations. Important section of consultative and diagnostic services, as is the aftercare and follow-up of the operated patients.

The department treatment of benign tumors of about 10,000 calls a year falls on patients with hemangiomas, papillomas, pigmented nevi, angiofibroma and other benign tumors. In-patient treatment of this group of patients is widely used modern cryosurgical, radiosurgery modes coagulation and destruction, as well as depending on the speed of blood flow (less than 30 cm/s) in the hemangioma, which can be visualized by ultrasound with dopplerography sclerotherapy performed with the introduction of formations sclerosants interstitially in benign tumor (alcohol-novocaine mixture 700, Fibro-Vein 3%). We can not say about the introduction of our practice of modern surgical lasers, which have been shown excellent cosmetic results in the shortest time.

Application of modern technology opens up new possibilities of diagnosis and treatment of complex patients, including young children. Using ultrasound with color Doppler mapping can determine the velocity of blood flow in the vessels of the hemangioma, allowing you to choose the tactics of treatment from various kinds of conservative to operative. Especially impressive results in our clinic has been achieved in the treatment of hemangiomas complex anatomical localization. Method of treatment is the combined use of embolization of the vessels feeding angioma and microwave destruction in the last 2 years in the correction of this pathology is widely used laser vaporization. Such patients undergo inpatient treatment in microsurgery department of our hospital. Staged outpatient aftercare is carried out on the basis of an outpatient surgery center, or interhospital being the final stage of complex treatment process. In this case, we are talking not about inpatient and about impatiant technologies.

Outpatient stage treatment of keloid scars, based on microwave destruction, has been used successfully by us and is an alternative to surgical treatment. Currently we are using a new generation of equipment that allows a greater volume to destroy abnormal tissue in a shorter period of time.

Quite successfully applied in our clinic, the method of tissue expansion (balloon dermotension) with expanders for treating such types of diseases, as alopecia, deformations or defects of the abdominal wall and the front limbs, with an elongation of the facial nerve, as well as the formation of the expanded bladder ureter. Expander — a device for the temporary implantation under the skin, which gradually increases in size due to its filling with liquid, and thus, stretches the tissue located above it. After obtaining sufficient material expander is removed, and the resulting supply of fabrics used for plastics. Actually dermotension can be performed entirely in an outpatient surgery center.

Orthopedics outpatient department is important, integral link of our Center. Uptake of the year is more than 10,000 children. Patients receiving treatment with a wide range of orthopedic pathology, plaster work carried out varying degrees of complexity, minimally invasive surgery. Developed a set of differential diagnostic criteria of congenital and acquired diseases of the hip joints in young children. Much attention is paid to the study of the development of the joint after the treatment with the use of modern diagnostic techniques. With the involvement of specialists from other industries have developed assessment clinic blood in articulation structures schemes physiotherapy, medication support.

With years of experience in the treatment of congenital clubfoot, recently preferred method Ignacio Ponseti, which includes gypsum, minimally invasive achillotomy wearing the brace. This method allowed us to achieve good functional and cosmetic results in less time compared to traditional methods previously applied.

Separate, constantly evolving activity of the orthopedic department is the diagnosis and treatment of dysplastic and acquired pathology of the child’s foot. Developed evaluation criteria used plantography digital podoskopphy. In individual orthotics technology is used “Sursil-Ortho,” which allows the physician to make an orthopedic brace yourself strictly individually, taking into account the anatomical and physiological and static-dynamic features of the child’s foot and, in the future, using the ability of the material to the remodeling, once made correction brace. Also, the department developed a modification of proofreaders “Sursil-Ortho” for the treatment of valgus flat-mentioned stop that also successfully used for the treatment of clubfoot after operative and conservative treatment with elimination bring forefoot valgus and component. This creates an opportunity for the maturation and coordination of the muscles of the foot arches, which is especially important in children and toddlers.

In the outpatient department of orthopedics, also, is the treatment of children with a cyst Becker, lies in its puncture, followed by washing and oral administration of cyclophosphamide in it.

In the second half of 2008 as part of hospital complex started uroandrological module, which includes the department of pathology of the pelvic floor and
pediatric andrology. Relevance due to a significant number of unsolved problems in the disorder of the pelvic organs, clinically manifested incontinence and defecation disorders. Genesis of these disorders and a range of different reasons is extremely broad. The functional — to the damage vegetative maintenance pelvic to severe organic defects.

A multidisciplinary approach reveals not only the main causes of disorders of the pelvic organs, but also to develop a reasonable treatment option pathogenesis. The ultimate goal of the treatment program is the social department and functional rehabilitation of the patient.

In the framework of the State program, aimed at improving reproductive health, and given the high frequency of diseases and malformations of the urogenital system was isolated specialty - pediatric urology - andrology. In this regard, as part of an outpatient surgery center created Pediatric Andrology, whose main task is to identify the most common causes of reproductive disorders in children.

Priority in the work of the department are andrologic following areas:
1. Develop objective criteria for assessing the state children reproduction health and adolescents.
2. Conducting research on the prevalence of diseases causing reproductive failure.
3. Development of scientific methods for the prevention of reproductive disorders.
5. Development of scientific methods to assess reproductive prognosis in patients in the postoperative period.

An important aspect of an outpatient surgery center is effective analgesia patients. Modern principles of pain management actively introduced into the work of all departments of the hospital complex. Modified and adapted versions applicative and wires regional anesthesia proposed scheme preoperative patients. All invasive procedures and surgical interventions provided an experienced anesthetist.

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