

**Multiprofile hospital of active treatment and emergency medicine N.I.Pirogov**

Clinic of children's surgery  
Clinic of children's traumatology  
Clinic of emergency neurosurgery

**MEDICAL HISTORY**  
of **MONICA IVAYLOVA YOTOVA**

4 years old

Varna, 1 Feniks St.

Medical record No. 16996

dated 29 June 2004

Discharged on 11 September 2004

**Diagnosis:**

Contusio cerebri, Haemorrhagia subarachnoidea et haematoma intracerebrale lobi frontalis sinistri. Amputatio subtotalis cruris dextri. Fractura femoris aperta sinistra. Fractura antebrachii dextra. Fractura humeri sinistra proximalis. Haemoperitoneum 800 ml. Ruptura hepatis et lienis. Haematoma retroperitoneale. Haemopneumothorax dextra.

**Surgical interventions:**

29 June 2004: Laparotomia. Sutura hepatis et lienis. sutura sigmae. Reamputatio cruris dex. Repositio et enbrochage. Thoracocentesis dextra.

2 July 2004: Craniotomia frontalis sin. Evacuatio haematomatis. Drainage.

23 July 2004: Trepanatio punctiformis No. 2 frontalis bilateralis. Drainage subduralis – carried out on the occasion of Hydromatis bifrontalis.

26 August 2004: Reoperation. Drainage subduralis.

**Anamnesis and status:**

The child was admitted in the shock room at the children's surgery after suffering a severe car accident.

At the admission the child was in shock and coma with no spontaneous or stimulated motor activity, pupils – the right equal to the left one equal to 2 mm, not responding to light, and Glasgow coma scale 3.

With evidence for a lesion of the parenchymal organs a laparotomy was performed and a suture of the ruptures of the spleen and the liver. A suture of the rupture of the sigma. A right-side thoracocentesis due to evidence for a haemopneumothorax.

The traumatology team performed an amputation of the left shank with an autoimplantation of a part of the tibia for the purpose of preserving a larger stump. A metal fixation of the left femur, setting the right antebrachium in plaster, and immobilization of the left brachium.

A computed tomography dated 2 July 2004 with evidence for an intracerebral haematoma in the left frontal-basal region in a relatively unchanged general condition, Glasgow coma scale 5-6, a decision was made for a surgical treatment and an evacuation of the haematoma. Operation No. 1300 dated 2 July 2004 – Craniotomia frontalis sinistra, evacuatio haematomatis. Drainage. The postoperative period went well, the initial healing of the operation wound completed. The general and neurological symptoms slowly improved and no evidence for serious focal neurological symptoms were present, Glasgow coma scale 10 on the 17<sup>th</sup> postoperative day.

A control computed tomography of the head was performed on 9 July 2004 and 21 July 2004 with evidence for enlarging bilateral frontal subdural hydromas on account of which a decision was made for a surgical intervention and evacuation of the hydromas. Operation No. 1501 dated 23 July 2004 – Trepanatio punctiformis frontalis bilateralis, drainage subdurales. The general and neurological condition gradually started to improve. Pulmonary and abdominal condition – normal.

Upon transferring from the children's reanimation to the ward the child was conscious, in the state of a waking coma, acritical, non-contact, her eyes did not follow and she did not execute motor commands, she responded to pain stimulations with single unintelligible sounds and a flexion of the limbs. Pupils – the right equal to the left one equal to 3,5 mm responding to light, a verbal contact was absent, no evidence for serious focal symptoms, Glasgow coma scale 10-11.

Towards 30 July 2004 the following was ascertained regarding the affected upper and lower limbs:

1. Right upper limb – a consolidated epiphysial injury of the second type in the distal end of the radius, with a light postimmobilization contracture of the right cubital joint.
2. Left upper limb – a consolidated fracture of the proximal end of the humerus, with the motion of the left articulatio humeri recovered to the full extent.
3. Right lower limb – condition after an amputation of the proximal third of the shank with initially recovered and healed soft tissues and removed stitches. An initial flexional contracture of the amputation stump of the articulatio genus, treated conservatively with physiotherapeutic procedures and a dorsal plaster splint preserving the result achieved.
4. Left lower limb – a consolidated open fracture of the femur with a development of hypergranulations 1/1 cm in size in the region of the injury defect treated with silver nitrate where prior to the sanitation of the latter the limb has been immobilized using a dorsal plaster tutor splint.

After the necessary period had elapsed the bandages and the plaster splint were removed, the injuries were in the course of healing. The child was moving her limbs freely. The stump of the right shank had initially healed. A consolidation of the fractures of the left humerus, left femur, and right antebrachium.

A separate medical history has been presented regarding the neurological status.

**Section of neurosurgery  
Multiprofile hospital of active treatment and emergency medicine  
Pirogov EAD Sofia**

**MEDICAL HISTORY  
of MONICA IVAYLOVA YOTOVA**

4 years old

Varna, 1 Feniks St.

Medical record 16996

admission date: 29 June 2004

discharge date: 11 September 2004

**Final diagnosis:**

Contusio cerebri. Haemorrhagia subarachnoidalis traumatica. Haematoma intracerebrale. Lobi frontalis sin. cerebri. Hydromatis bifrontalis. Contusio abdominis. Ruptura hepatis et lienis. Haemoperitoneum 800 ml. Haematoma retroperitoneale. Amputatio subtotalis cruris dex. Fractura femoris aperta sin. distalis. Fractura antebrachii dex. Fractura humeris sin. proximalis.

**Accompanying diseases:** none

**Anamnesis:**

The child was admitted in the Children's shock room at the Institute in an extremely serious general condition, in coma. Injured in a car accident as a passenger. Diagnostic and reanimation measures were immediately undertaken.

**Objective status:**

**Local status:**

A subtotal amputation of the right shank to a medium level – lower third. The distal part was only held by a fascial lambo. A transverse fracture of the tibia and fibula where bone fragments are absent. A supracondylar multifragment open fracture of the left femur, with a large dislocation. A fracture with a tumescence in the region of the proximal end of the left humerus. A fracture of the right antebrachium. A haematoma and a tumescence in the left frontal and orbital regions.

**Somatic status:** Extremely serious general condition. The child was in a haemorrhagic shock with clinical and echography data showing a freely moving fluid in the abdominal cavity.

**Neurological status:**

In coma. Pupils – R = L, no perceptible lateralizing neurological symptoms.

**Paraclinic tests:**

At the admission – serious anaemic syndrome.

Computed tomography of the cerebrum: /29 June 2004/ A massive subarachnoidal haemorrhagia was ascertained supratentorially, more distinct in the left region, with a presence of blood, the cerebral sulci and the sylvian fissure in the left. The cerebral gyri were smooth which was indirect evidence for a total cerebral oedema. Presence of blood in the occipital horns of the lateral ventricles. Ventricular system arranged on the central line.

**Computed tomography of the cerebrum:**

/2 July 2004/ A haemorrhagic collection formed intracerebrally arranged in the frontal-basal region in the left, surrounded by a low-density region of perifocal oedema. Smaller intracerebral haematomas were observed deeply temporally and parietally periventricularly on the same side. The subarachnoidal haemorrhagia is in the phase of resorption. The ventricular system was arranged on the central line.

Computed tomography: /3 July 2004/ Condition after a surgical intervention in the left frontal region. The intracerebral haemorrhagic collection in the left frontal-basal region was almost completely evacuated and a small residium was visualized in the bed.

Computed tomography: /26 July 2004/ A presence of hydromas in the frontal-parietal region bilaterally. Ventricular system on the central line.

Computed tomography: /1 September 2004/ The bilateral hydromas were completely evacuated, a posttraumatic internal hydrocephaly. Ventricular system arranged on the central line.

**Consulting examinations:**

a pediatrician, an anesthesiologist, a children's surgeon, a children's traumatologist, a neurosurgeon.

**A therapeutic scheme:**

infusions, dehydrating, corticopreparations, antibiotics, vitamins, analgetics, anticonvulsants, vascular dilators. Haemotransfusions.

**Progress of the disease:**

Admitted in the Children's shock room in an extremely serious general condition. A decision was made for emergency surgical interventions on the grounds of the vital signs.

**Invasive diagnostic and therapeutic procedures:** none.

**Date and time of the surgical intervention and diagnosis:**

Operation No. 1269 dated 29 June 2004 – Laparotomy mediana superior et inferior. Evacuatio sanguinis. Sutura hepatis. Sutura lienis. Cerosatio sigmae. Drainage cavi abdominis No. 3.

Operation No. 1270 dated 29 June 2004 – Reamputatio cruris dex. Repositio enbrochage.

Operation No. 1300 dated 2 July 2004 – Craniotomy frontalis sin. Evacuatio haematomatis intracerebrale lobi frontalis sin. cerebri.

Operation No. 1501 dated 23 July 2004 – Trepanatio punctiformis No. 2 frontalis bilateralis. Drainage subduralis.

Operation No. 1699 dated 26 August 2004 – Reoperatio. Drainage subduralis dex.

**Progress of the disease after the operation:**

The child was accommodated during the postoperative period in the Children's reanimation at the Institute in a serious general condition. Hypothermic in the first hours. In coma. No spontaneous or stimulated motor activity. A treatment was initiated immediately with the above specified medicaments. A repeated haemotransfusions with view to the serious anaemic syndrome. Intubated, on an artificial pulmonary ventilation. In the following days the serious general condition remained, with a tendency to stabilization. Haemodynamically stable. Febrile and subfebrile. Glasgow coma scale – 5. Under the active supervision of a children's

surgeon, a neurosurgeon, and a traumatologist. The initial healing of the operation wound of the amputated limb completed, the stitches were removed, the Kirschner's pins were pulled out. After an improvement and stabilization of the condition the child was transferred to a ward of children's thoracic surgery conscious, lying with her eyes open, no verbal contact was established. Her eyes did not follow. She responded to stimulations with a flexion of the limbs. Pathological reflexes were present – bilateral oral automatisms. Motor activity – reduced muscular strength in the right limbs, more distinct in the brachium. Higher cortex functions – a complete motor aphasia and a partial sensor one. The child was fed through a nasogastric tube. A limited amount of food and fluids were taken orally. Consulted repeatedly with an ophthalmologist – eyegrounds – papillae – pale, with sharp outlines, vessels and periphery – no anomalies. Estimated on the Glasgow coma scale. 10. A daily active rehabilitation was carried out. Treatment with: nootropic, vascular dilators, anticonvulsants, EEG dated 12 August 2004 - /examined alert and in a natural sleep/ Basic activity with a low amplitude tetra-rhythm mixed with short groups of medicamentally determined beta-rhythms as well as delta waves single and in short groups prevailing in the right hemisphere. The appearance of a greater amount of delta waves with a higher amplitude was registered when falling asleep. Normal response without revealing any carotid ganglia. No specific focal or generalized epi abnormality was registered.

**Objective condition at the discharge:**

The child was in a good general condition, with a clear consciousness, the eyes followed at certain moments, she executed some commands. Set up vertically. Sat in the bed comparatively stably. Permanently afebrile. Haemodynamically stable. Fed through a nasogastric tube but also took a limited amount of food and fluids orally as well. A slightly reduced muscular activity in the right limbs. Regarding the condition of the locomotory system – right upper limb – a consolidated epiphysial injury of the 2<sup>nd</sup> type in the distal end of the radius, with a light postimmobilization contracture of the right cubitus. Left upper limb – a consolidated fracture of the proximal end of the brachium, with completely recovered movements of the left brachial joint. Right lower limb – condition after an amputation of the proximal third of the shank with partially recovered and healed soft tissues and removed stitches. An initial flexion contracture of the amputation stump of the articulatio genus. Left lower limb – a consolidated open fracture of the femur with a development of a hypergranulation 1/1 cm in size in the region of the injury defect treated with silver nitrate where prior to the sanitation of the latter the limb was immobilized in a dorsal plaster tutor splint.

**Recommendations for a health protection regimen:**

Directed for continuation of the rehabilitation to a specialized rehabilitation institution in her place of residence.

**Prescribed medicament treatment:**

Medicament	Form	Dose
Pyramem	Capsules	2 x 2
Sermion	Pills	1 daily
Decapine	Pills	As per a scheme

**Control examination at the hospital:** After 3 months.

**Enclosed to the Medical history**

**Tests:** Computed tomography