94. A 14-YEAR-OLD FEMALE WITH COMPLEX ORTHOPEDIC AND CRANIOFACIAL TRAUMA FOLLOWING AN INTENTIONAL HIGH ALTITUDE FALL

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Introduction. Pediatric trauma is of great concern as less data is available than in adult populations. Although the main cause of trauma in this subset of the population is connected to motor vehicle accidents, other causes such as falls from height and autolysis persist as major factors for high energy trauma. Paediatric bone physiology is of obvious concern in this field of work. Orthopedic trauma directly correlates with longer ICU stays.

Case presentation. A 14 year old female patient arrives under general anesthesia by ambulance from the Brasov pediatric hospital after a reported suicide attempt by jumping from 12 meters height. The general condition is markedly decreased. Pain and functional impairment, deformity, swelling and palpable bony discontinuities of both lower limbs are present. Complex craniofacial trauma is also present. To ensure hemodynamic and homeostatic stability the surgical treatment is performed in three operations over several days. Preoperative treatment includes prophylactic antibiotherapy, blood transfusions, hemostatic and antifibrinolytic agents. In the first operation a closed reduction and osteosynthesis with titanium elastic nails on the left femur, and an external fixation and osteosynthesis on the right femur were performed. Additionally, a left paramedian osteosynthesis of the mandible is completed simultaneously. Five days later the second operation was performed. This operation consisted of a removal of the external fixator, open reduction and osteosynthesis with a locking plate on the right femur. The third operation was performed another two days later. It involved reduction and minimally invasive osteosynthesis of the first left metatarsal. On follow-up, a good development and a favourable condition are given.

Discussions. This is an example of a complex multi disciplinary case in the field of pediatric orthopedics and traumatology. Crucial factors for the favourable outcome are the prompt transfer to a specialised hospital, well-timed staged surgical interventions and a structured follow-up regime. Spacing of the operations ensured that she was able to be operated on; a crucial decision to increase outcome quality.

Conclusions. The team was led by the department of pediatric surgery and orthopedics and included also oromaxillofacial surgeons. Complex cases like this should stand as an example of teamwork to decrease the patient's mortality and morbidity. More research for techniques is to be done to elevate medical approaches in cases like these.

Keywords. Pediatric surgery, Pediatric traumatology, Polytrauma, Suicide attempt.

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