

6th World Congress on Spine and Spinal Disorders

December 06-07, 2021 | Dubai, UAE

Fractures of the lower extremities in children with Spina Bifida

Stanislav V Ivanov

G.I. Turner National Medical Research Center for Children's Orthopedics and Trauma Surgery, Russia

Statement of the problem: Spina Bifida (SB) is a malformation of the Spine and Spinal Cord, accompanied by various Orthopedic Disorders of the Spine and lower extremities, including fractures of long tubular bones. Our study aimed to study patterns of occurrence and the clinical and radiological features of fractures of the long tubular bones of the lower limbs in children with sequelae of SB.

Materials and Methods: From 2006 to 2020, 671 patients with SB were examined and treated at the H. Turner National Medical Research Center for Children's Orthopedics and Trauma Surgery. Clinical-neurological and radiographic methods were used. The neurosegmental level of Spinal Cord involvement was determined using the Sharrard classification, and the motor level was assessed according to the method proposed by Melbourne Medical University. The clinical picture of a fractures bone in a child with SB has many characteristics. There was no abnormal mobility in the fracture site in 46% of cases, edema was absent in 83% of children, and pain in the fracture region was observed in only 17% of cases. The radiographic features of the atypical fractures bones in children with sequelae of SB included lack of a fracture line, presence of a hypertrophic periosteal reaction, and sclerosis areas at the fracture site.

Conclusion: The frequency and localization of fractures of the lower extremities in children with SB depend on the neurosegmental level. The clinical picture of a fracture often differs from ordinary fractures in the absence of pain, edema in the fracture area and displacement of bone fragments, which must be considered when making a diagnosis. Features of the clinical and radiological picture are associated with the presence of low bone mineral density in this pathology due to a decrease in the level of motor activity of patients.

Biography

Stanislav V Ivanov, Head of Department N5 (Department of Cerebral Palsy and Center Spina Bifida), G.I. Turner National Medical Research Center for Children's Orthopedics and Trauma Surgery. He is a leading specialist in the treatment patient with Spina Bifida and Cerebral Palsy. Developed and implemented the system of multidisciplinary approach in the treatment of patients with Spina Bifida and Cerebral Palsy in Russia.

e: ortostas@mail.ru