

## **Internal hemipelvectomy - possibility of reconstruction in children and youth with primary malignant bone tumors.**

**Szafrański A, Rychłowska-Pruszyńska M, Pachuta B, Malesza I., Walenta T  
Clinical Department of Oncological Surgery in Children and Youth  
Institute of Mother and Child, Warsaw, Poland**

In the period 1994 to 2013 in our Clinic 58 patients have been operated with primary malignant bone tumors in pelvis localization; 35 boys and 22 girls, in age from 5 to 18 years, average 13 years. Operations have been made in second step, after neoadjuvant chemotherapy. In histopathologic diagnosis were sarcoma Ewingi in 30 pts., osteosarcoma in 20 pts., chondrosarcoma in 8 pats. Localization by Enneking classification; stage I were in 14pts, stage II in 40 and stage III in 11 pts. Total hemipelvectomy have been made in 4 pts and internal hemipelvectomy in 54 pts In reconstruction were used different systems; bone grafts, AO plates, endoprotheses (21 pts) and trevira tube.

Results. Alive 39/58 pts, follow up 2-23 yrs, mean 6,2 yrs. Early and late complication were observed in 24 cases. Satisfactory functional results in 65 %

Conclusion; Possibility of internal hemipelvectomy depends on; 1) localization and extent of the tumor; 2) tumor reaction after neo-adjuvant chemotherapy 3) patients age. Internal hemipelvectomy as limb salvage surgery is satisfactory, but sufficient results of surgery depend on extent of operation and rehabilitation. Operators' experience is of basic importance for surgery