Abstract

Modular concept of reconstruction in malignant bone tumors in children and adolescents is trying to solve a complex problem in order to replace a certain bone segment of various sizes or joint, fully adjustable and fully aware of morpho-functional features related to the child's age.

Given the high frequency of malignant bone tumors in children, occupying the third place in osteoarticular pathology, after injuries and malformations, due to the progress made in terms of knowledge and identifying certain factors (genetical, biological, immunological, etc.) and the increasing life expectancy of these sick children, pediatric orthopedics should offer the possibility of reconstruction of the resected segment.

One of the basic concerns in this regard is modular endoprosthetic reconstruction of the resected area, adapted to each case and each bone or osteoarticular segment.

Amputation is no longer the only option in the modern treatment in children and adolescent bone malignancies, being often replaced with increasing size piece resection and reconstruction with large massive cortical bone grafts or modular endoprosthetic replacement.

Keywords: malignant bone tumor, en-bloc oncologic resection, osteoplastic osteo-arthroplastic reconstruction.