In the global process of rehabilitation of the amputee, the installation of an adapted orthopedic prosthesis constitutes the main objective of PRM departments. Satisfaction of the patient of the prosthesis is determining in its use and participate in the quality of life of the patient [1].

Objective To estimate the satisfaction of patients with orthopedic prosthesis made in the orthopedic center of the CHNU-HKM (OC/CHNU-HKM) of Cotonou, from 2006 till 2011.

Method Cross-sectional study with descriptive and analytical aim which consisted in seeing again between September, 2012 and January, 2013 47 subjects according to the criteria of inclusion and exclusion well defined on 137 patients with prosthesis from OC/CHNU-HKM, between 2006 and 2011, that is 6 years. Their level of satisfaction towards the prosthesis and their quality of life according to the London Handicap Scale were the studied dependent variables.

Results The subjects were 39,7 years old on average and for the greater part men (85.1%). Prosthesis were exoskeletal (59.6%) and endoskeletal (40.4%). For the majority (57.5%), the price of the prosthesis was high, but 63.8% were satisfied with it. The quality of life was good for 14.9%. The level of global satisfaction of the patients was influenced by their level of satisfaction in gait, by the solidity of the prosthesis, by the facility to use the prosthesis in daily and professional activities. There was no correlation between the level of satisfaction of the patient towards the prosthesis and his quality of life (P = 0.24).

Discussion/conclusion The satisfaction of the patients of their prosthesis is major for the good use of the device. For that purpose, it is necessary to reconcile the functional, esthetic financial requirements of the patient in the realization of the prosthesis.

Keywords Satisfaction; Prosthesis; Orthopaedic center

Disclosure of interest The authors declare that they have no conflicts of interest concerning this article.

Reference

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C004-005-e Severe congenital scoliosis: What possibilities for seating installation and mobility?

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Introduction We call congenital scoliosis a spinal curve which may be present before age of 3 [1]. Some resolve spontaneously while others can severely progress, but the literature do not report data about their prevalence. Its impact is multiple: the curve can induce an oblique pelvis, an alteration of respiratory function, some nutritional troubles or pain. All those can impair, daily the possibilities of prone or sitting positions, or capacities of mobility. And those problems, as we know, have not being studied in publications up to now.

Objective From 5 situations, we will approach the complaints of children and teenagers with severe congenital scoliosis, about their sitting installation with discomfort, their mobility or participation limitations. In each case, we will also report some possible difficulties for the adaptation of compensation devices.

Discussion/conclusion Young patients with severe scoliosis can suffer daily of bad installation, painful and impossible to sustain during hours. They can need devices to support their mobility (scooter, wheelchair). Those problems are not enough evaluated and taken into account while they can impact patient’s quality of life. Attribution of devices for compensation is not a simple course, from the evaluation to the technical realization (custom-made most generally) with sometimes even legal difficulties.

Keywords Congenital scoliosis; Children; Wheelchair; Mobility

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Osseointegration of the lower limb: Reduction of mechanical strain on the abutment

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Introduction The osseointegration improves the quality of life for amputees and brings indolence [1]. Unlike a socket, the abutment concentrates stresses. The tall and heavy patients have to face break of abutment. Abutment's changes have to be done in operating room under general anesthesia.

In the case of a patient varus/valgus, how to reduce the mechanical stresses on the abutment in order to reduce the frequency of changing this critical part?

Materials and methods This study has focused on a patient valgum osseointegrated since January 2012 and in very good health.

We have evaluated in static position (bipodal support, without speed or acceleration, frontal plane) mechanical stress at the junction abutment–implant in three different cases:
- prosthesis aligned with the abutment;
- prosthesis aligned with the abutment with varus due to slight plastic deformation of the abutment;
- prosthesis vertically and translated in the frontal plane with a load line passing through the bottom of the abutment and the femoral head.

We have used a telemetry, goniometer, ruler, CAD software, and scientific calculator.

The third case was possible by a long length of the residual femur's bone.

Results For a patient whose weight is 80 kg and the size 1.88 m, the values [1,2] of the torque at the junction abutment–implant are:
Case 1: 20.8 Nm
Case 2: 31.68 Nm
Case 3: 2.24 Nm.

We find between the case 1 and case 3:
- a sharp reduction of flows all around the abutment;
- a better ambulation;
- reduces strain and increases the life of the abutment for all patients;
- decreases patient's anxiety.

Keywords Osseointegration; Reduction of mechanical strain; Titanium OPRA

Disclosure of interest The authors declare that they have no conflicts of interest concerning this article.

References

Further reading
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