Rehabilitation outcomes in patients with arthroprostesis

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Background
Interventions for joint replacement has increased, so, the relative rehabilitation has undergone important developments. Aims of our study are to measure rehabilitation outcomes in the short post-operative term and to identify variables that can influence them.

Methods
The study was conducted between January and April 2014 in a group of 289 patients admitted after arthroplasty into a clinic specialized in intensive rehabilitation. For each patient was obtained: age, gender, Body Mass Index (BMI), Comorbidity Index (CI), Severity Index (SI), surgery day, day of transfer in the clinic, day of discharge, Functional Independence Measure (FIM) and Barthel scores at the admission. The last 2 measures was obtained also at the discharge. We considered as outcomes: the end-point at discharge, the difference between the FIM and Barthel score between admission(1) and discharge(2).

Logistic regression was used for the analysis.

Results

Hip prosthesis:
- FIM2-FIM1, the univariate shows that older patients have a greater recovery \( p < 0.05 \). This is not confirmed by the multivariate;
- Barthel2-Barthel1, patients with high CI \( p < 0.05 \) and SI \( p < 0.05 \) have a greater recovery.

The patients who arrive at the rehabilitation center on the third day after surgery, compared to those who arrive on fourth have a higher recovery \( p < 0.05 \).

Conclusion
The end-point shows outcomes similar to best international experiences. Older patients and those with a complex clinical condition (CI and SI higher) seem to have a greater health gain during the intensive rehabilitation.

For surgical structure appear economically useful to move patients at the clinic in the third day after the intervention and this does not seem to have any negative impact on the patients’ recovery.

Key messages
- Older patients and those with a clinical condition more complex (CI and SI higher) seem to have a health gain greater during the intensive rehabilitation
- For surgical structure appear economically useful to transfer at the intensive specialized clinic patients in third day after the intervention and this haven’t any negative impact on recovery.