

Comparative Study of Design and PCL-Substituting Systems of Total Knee Prosthesis

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Abstract

The aim of this study is to assess postoperative results obtained by different knee implants. The main implant types differences are given by generally implant design and by PCL substituting systems that are used.

Material and method: Between 04.2004 – 02.2012 we have performed 506 total knee arthroplasties (TKA), on a group of 460 patients. Our choice, was for cemented total knee prostheses, using PCL-substituting systems. Regarding general design and PCL-substituting systems of the implant we had divided the main group in three lots. In order to assess post-operative result we had used the American Knee Society Score (AKSS).

Results and discussions: All prostheses types that we had implanted, had registered satisfactory values of AKSS. Our study showed that one group scored higher values of AKSS, compared the other two, but there are not statistical semnificative differences ($p=0,09$).

Key words: knee arthroplasty, PCL-substituting system, implant design, AKSS, knee function

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