

How ICT Can Improve Joint Replacement Surgery



An EU project has confirmed that joint replacement surgery is much more successful with the use of ICT and computational modelling. It also decreases the costs associated with subsequent joint revision surgeries and it improves the quality of life of patients following such procedures.

This all has been made possible by the researchers of the MXL-project, which came to a conclusion the 19th of March.

The project addresses the specific aims and objectives of the ICT-2009.5.2: ICT for Patient Safety call by implementing an ICT framework that provides the surgeon with quantitative data to minimize the risk of joint overload and instability, thereby preserving the joint. The objective was to develop training and planning tools to provide the surgeon with an accurate, patient specific prediction of the outcome of joint surgery. MXL transforms the clinical management of joint surgery by implementing a combination of image processing, finite element and musculoskeletal modelling tools to provide an understanding of the individual biomechanical condition from standard clinical radiographs.

During the final review its progress was considered as excellent – all the objectives were fulfilled.

The MXL-project has been funded by the European Commission's FP7 scheme (http://cordis.europa.eu/fp7/home_en.html).

For more information, please visit:
<http://m-x-l.eu>

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