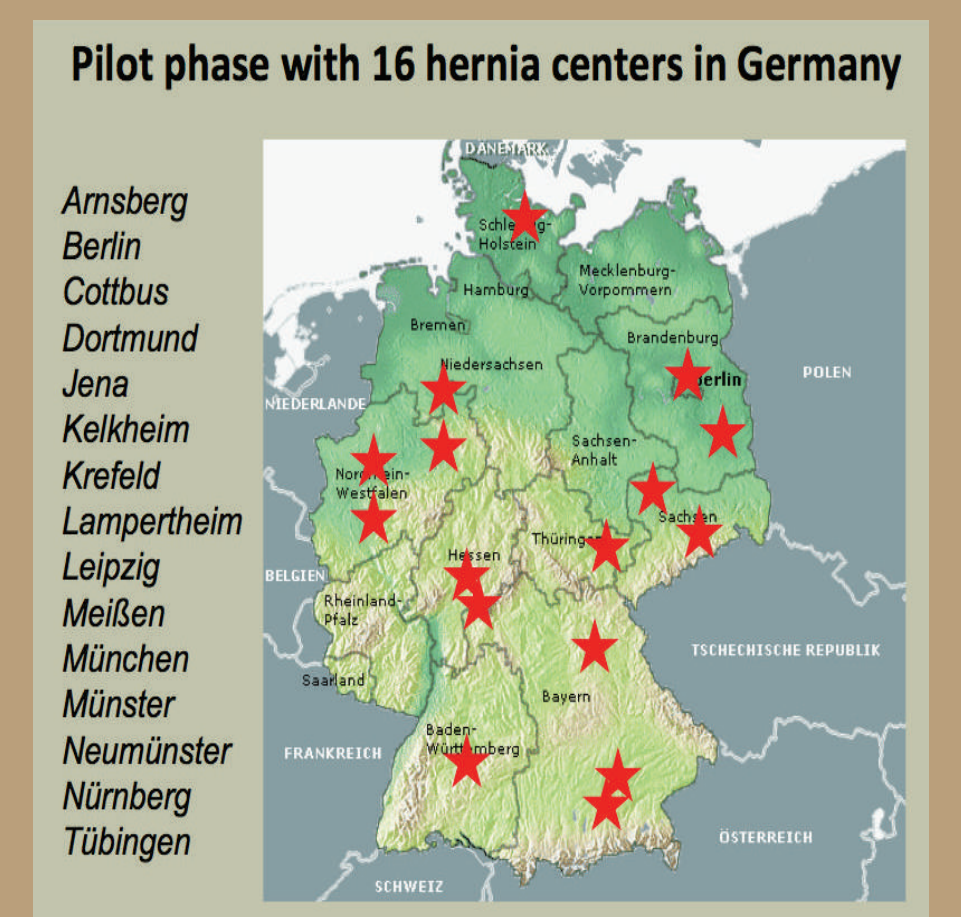




Quality of life after hernia surgery using 3dimensional and partly resorbable meshes

A. Koch, R. Lorenz, M. Wiese, H. Lippert for the working group Quality Assurance in day case hernia surgery in collaboration with the Quality institute for operative medicine, University of Magdeburg



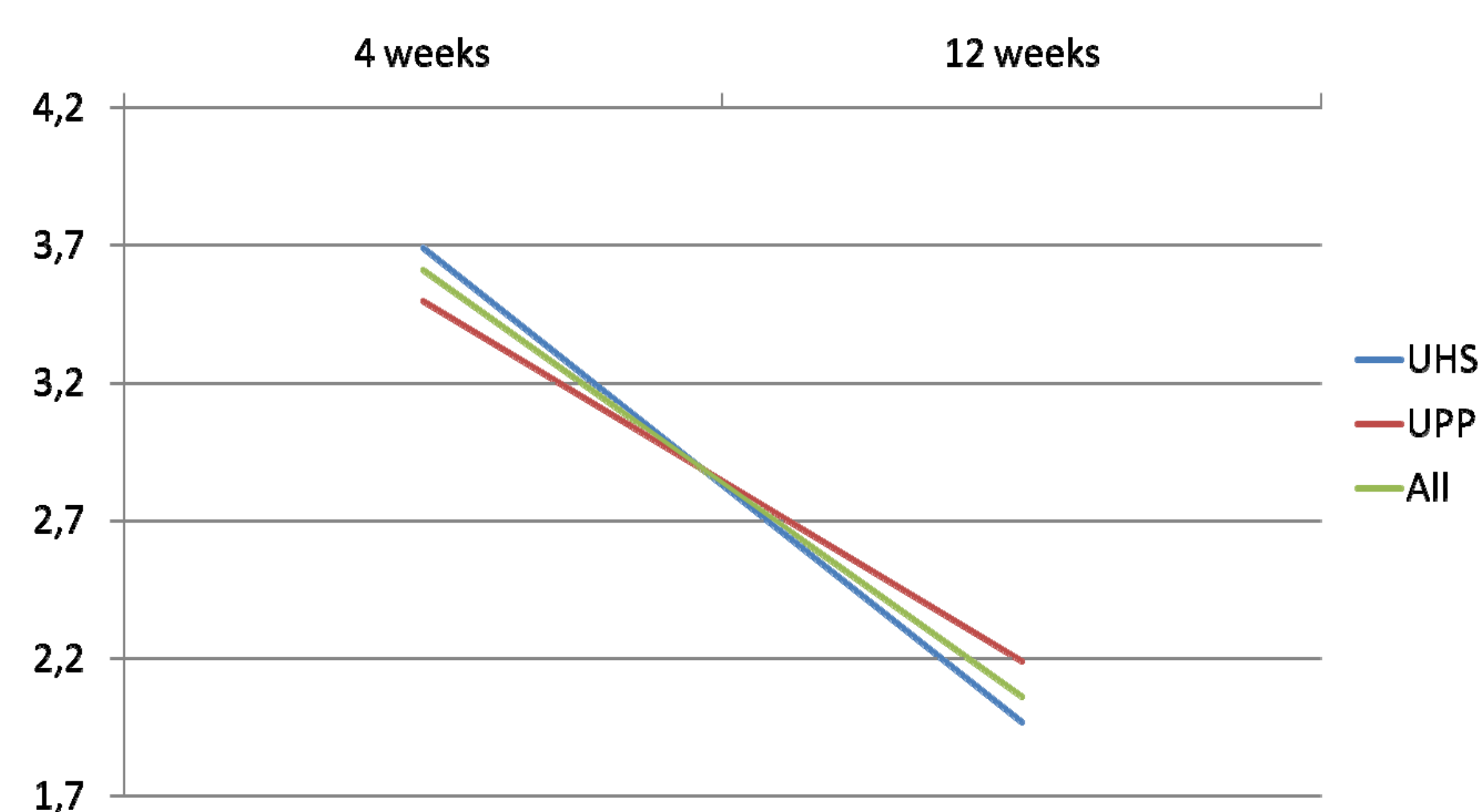
Background

With the use of mesh shown to considerably reduce recurrence rates for hernia repair and the subsequent improvement in clinical outcomes, focus has now been placed on quality-of-life outcomes in patients undergoing these repairs, specifically, as they relate to the mesh prosthesis. In 2007 Heniford et al. propose a new quality-of-life survey, the Carolinas Comfort Scale (CCS), pertaining specifically to patients undergoing hernia repair with mesh. (J Am Coll Surg 2008;206:638–644. © 2008 by the American College of Surgeons)

Methods

16 ambulant hernia centers in Germany carry on a large multicenter study on hernia repair using partly resorbable 3 dimensional meshes (UHS an UPP) since the 1st of October, 2009. The CCS questionnaire was mailed to all patients 4 and 12 weeks after surgery. A clinical examination by the surgeon was also made 4 and 12 weeks postoperatively. There are 3 main points in the questionnaire: sensation of mesh, movement limitations and pain. For each point, 8 questions (eg. Laying down, bending over, sitting down, walking etc.) and for every question a maximum of 5 points is possible.

Inguinal Pain – Clinical examination



Heniford et al. J Am Coll Surg 2008;206:638–644

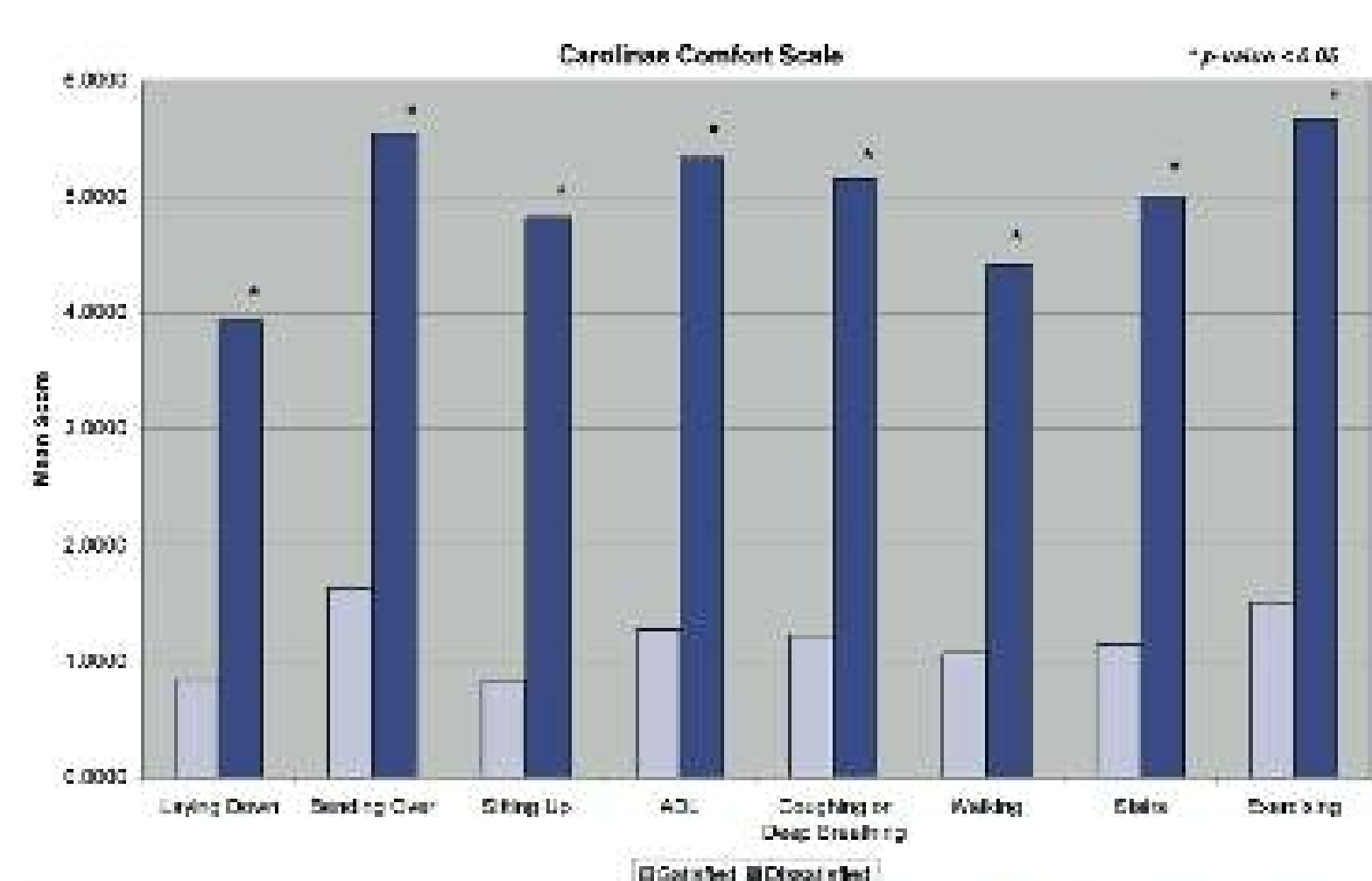


Figure 1. Carolinas Comfort Scale scores for satisfied and dissatisfied patients. ADL, activities of daily living.

Carolina Comfort Scale

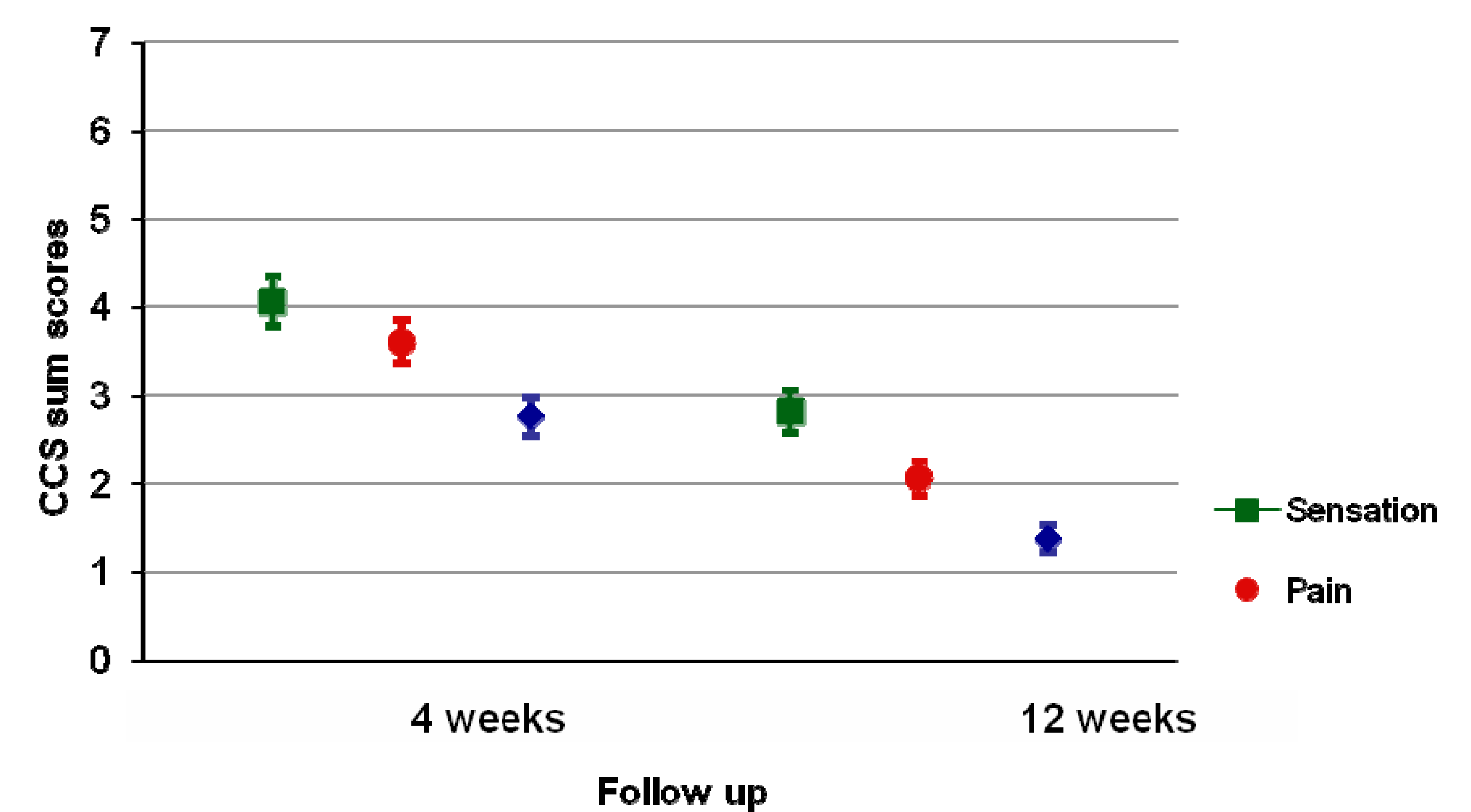
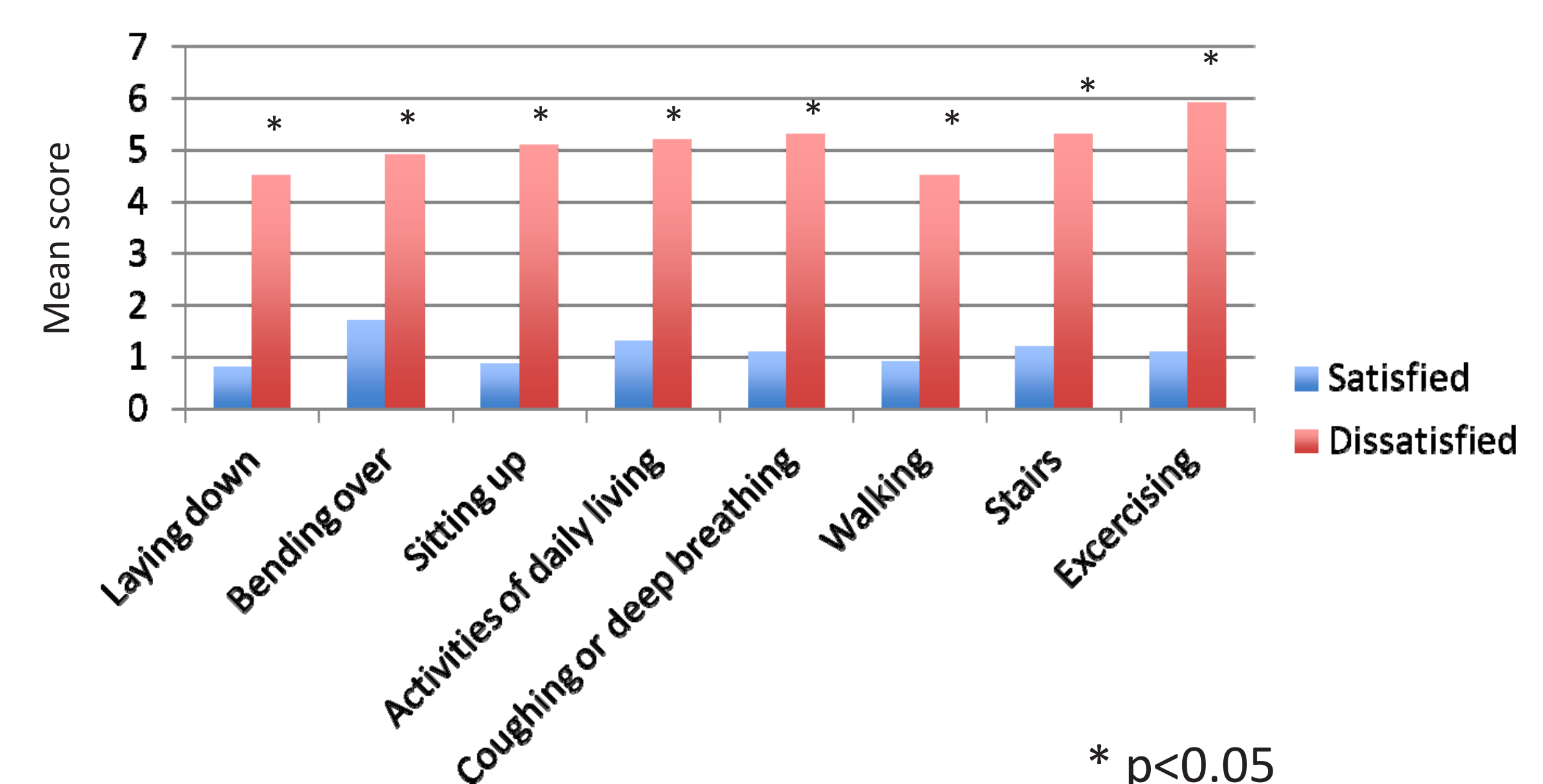
3 Questions for 8 activities: Sensation of mesh? Pain? Movement limitations?
Laying down | Bending over | Sitting | Activities of daily living | Coughing or deep breathing | Walking | Stairs | Exercising
Each question 0 - 5 points for each activity.
Maximum 40 points for sensation and pain.
Maximum 35 points for movement limitations.
For each activity maximum 15 points.

Heniford et al.: satisfied patients had a sum score below 3 points (in correlation with SF 36) (J Am Coll Surg 2008;206:638–644)

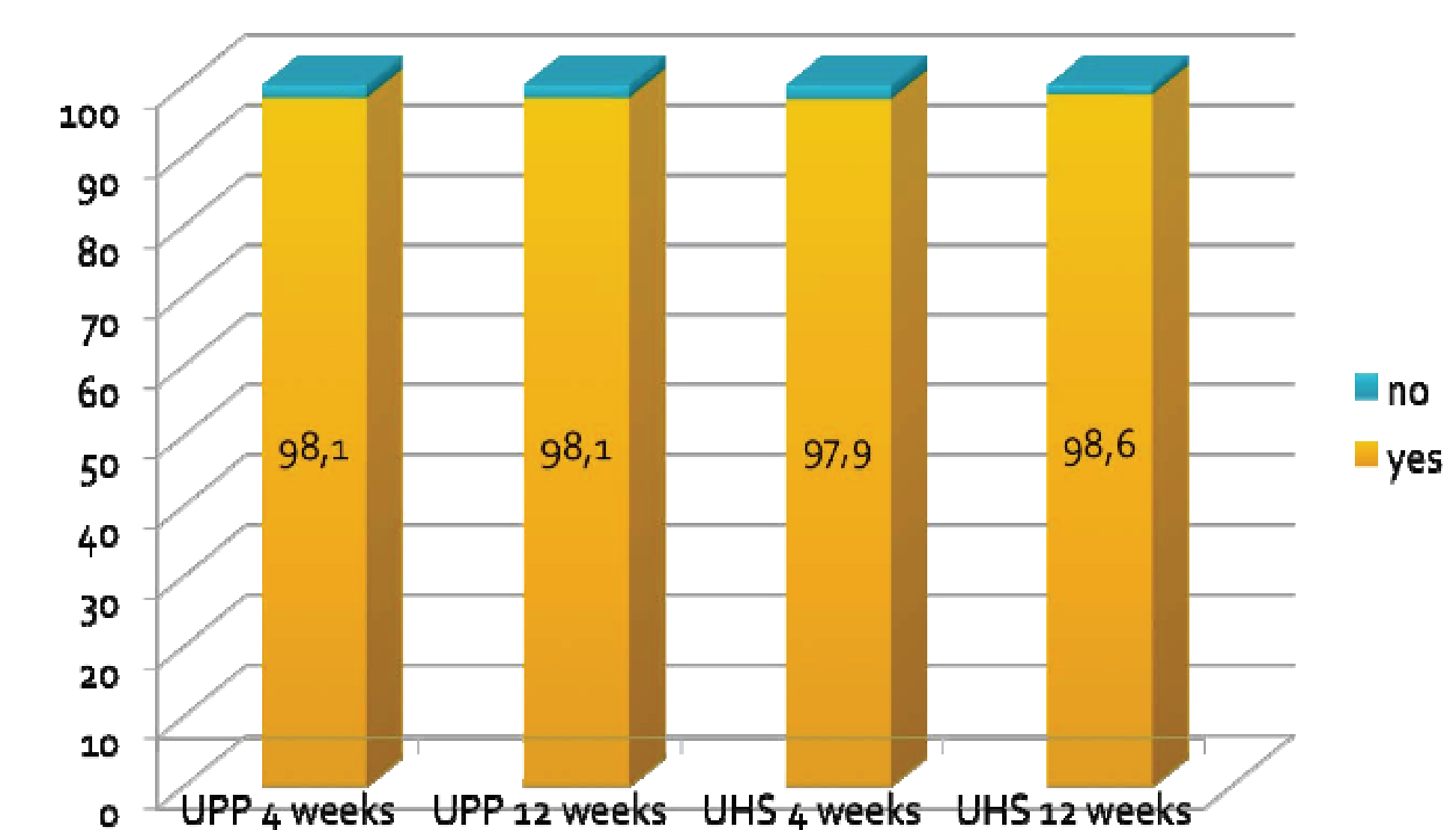
Results

Between 1st of October 2009 and 30th of September 2010 in total, there were 878 patients included (771 male and 107 female, median age 56 years). The postoperative morbidity was 1.5% and the recurrence rate after 52 weeks was 0.4% (n=3). Inguinal chronic pain was found in 16 patients (2.2%) The patient satisfaction rate was 98%. The sum score for the satisfied patients is in correlation with the score published by Heniford in 2008.

CCS scores for activity



Patients Satisfaction 4 and 12 weeks



Less pain and impairment of inguinal sensibility after 12 weeks.

No limitations in movement after 12 weeks.

98% of all patients are satisfied.

- > CCS is a feasible instrument to evaluate the quality of life after hernia surgery
- > Survey is easy to use and the acceptance is high
- > It should be the preferred quality-of-life survey of patients undergoing hernia repair with mesh

Conclusion

In conclusion, this study demonstrated that hernia surgery with 3D partly resorbable meshes is associated with low rates of recurrence and chronic pain. The rate of satisfied patients is high