Introduction: Sexual activity is often altered in patients suffering from chronic low back pain. The aim of this study was to evaluate conditions for sexual activity in a series of patients treated by lumbar total disc replacement, the incidence of retrograde ejaculation in men and the influence of the surgical access in such troubles.

Material and methods: 389 patients were analysed prospectively in this study and 164 men were treated by a L5-S1 disc arthroplasty. Sexual activity was evaluated through the Oswestry questionnaire and graded from 1 (normal sexual life) to 5 (impossible for pain reasons). Each patient was evaluated in the preoperative period, at 3, 6 and 12 months postoperatively.

Results: Based on preoperative questionnaire, 61% of the patients were at least severely restrained in their sexual life due to their lumbar pain. At final follow-up, 93% of the patients were classified as group 1 or 2 and none of them were classified as 4 or 5.

In the subgroup of men operated at the lumbosacral junction, 5 patients out of 164 reported a retrograde ejaculation (3% of the cases) always transient between 6 months and 1 year postop. In such cases, surgical access was trans-peritoneal in one case and left retro-peritoneal in 4 cases.

Discussion: Sexual disorders after anterior surgical approach are well-known and are related to lesions of the hypogastric plexus. According to this study, such lesions are less frequent via a right retro-peritoneal access for the lumbosacral junction. Its seems therefore an interesting alternative for one level total disc replacement. In case of muti-level procedure, a two-time approach associating a right access L5-S1 and a left retro-peritoneal access above may be a solution to avoid sexual complications. Deterioration of sexual life is a part of the symptoms reported by patients suffering from chronic low back pain. Total disc replacement seems efficient on these symptoms as well as lumbar pain.