Minimally invasive surgical techniques have been rapidly diffusing in recent years. Different devices are now available for the treatment of lumbar spine degenerative disease. They allow a good symptoms relief as well as a short time of surgery and hospitalization. We present our experience with a novel system for percutaneous bilateral facet motion augmentation. This system was designed to limit painful spinal motion, enlarge the foramina and achieve intradiscal decompression. It is composed of a bilateral titanium anchor connected to a silicone stabilizer.

Since February 2009 we used the percutaneous facet motion augmentation system at our institution. Major indications were single level degenerative disc disease and spinal stenosis.
We consider 60 patients for the present study. Mean age was 46.6 years old (range 38-72). Treated levels were L4-L5 (28 cases), L3-L4 (12 cases), L5-S1 (12 cases) and L2-L3 (8 cases).
We performed the surgical approach under spinal anesthesia whenever was applicable (53% of patients). Follow-up data were recorded at 2-months and 6-months. Clinical results were assessed using the Visual Analogic Scale (VAS) and the EQ-5D questionnaire.
Overall results were satisfactory in 56 patients. Mean pain VAS score improved from 7.7 at baseline to a value of 2.2 at 2-months follow-up.
The remnant 4 patients had minimal or no changes. Two of these patients were subsequently treated with traditional transpedicular stabilization system.
Mean procedure time was 26 minutes (range 18-40 minutes). Early mobilization was possible 12 hours after surgery in all patients. Hospital discharge was possible at 24-36 hours. No intra- and post-operative complications were observed.
Preliminary results are good and promising. Surgical technique is easy and satisfy requisites for a minimally invasive procedure. Percutaneous bilateral facet motion augmentation system represents a modern option to spinal fusion in selected cases.