

## Letter to the Editor concerning “Radiographic evaluation of indirect decompression of mini-open anterior retroperitoneal lumbar interbody fusion: oblique lateral interbody fusion for degenerated lumbar spondylolisthesis” by Jun Sato et al. *Eur Spine J* (2017) 26: 671–678

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Received: 11 September 2017 / Accepted: 28 September 2017 / Published online: 13 October 2017  
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Dear Editor,

With interest I read the article by Jun Sato et al. [1] describing a study in which they examined the radiographic and clinical efficacy of OLIF for lumbar degenerated spondylolisthesis.

Oblique lumbar interbody fusion (OLIF) uses an approach between the aorta and psoas to avoid nerve injury. It can indirectly decompress the spinal canal in lumbar degenerated spondylolisthesis.

In Sato’s study, the assessed 20 patients with lumbar degenerated spondylolisthesis underwent OLIF and percutaneous pedicle screw fixation without posterior laminectomy. Patients were diagnosed on X-ray and magnetic resonance imaging (MRI), myelography, and computed tomography. Degree of upper vertebral slip was evaluated with CT.

However, spondylolisthesis is best visualized on lateral standing radiographs because spondylolisthesis is a dynamic condition, and supine positioning can cause the slip to reduce into normal alignment [2–4]. Sato’s results show upper vertebral slipping was significantly decreased at 6 months after surgery, which means spondylolisthesis visualized on standing radiographs also exist on CT in a supine position. But it is possible that some patients diagnosed spondylolisthesis on lateral, standing radiographs may be visualized normal in the supine position on CT. Thus, there may be a bias of patients in Sato’s study.

According to this consideration, other readers or researchers who may be interested to replicate the study may not get the same result if they evaluate those patients whose slips reduce into normal alignment in supine position. Lateral standing radiographs may be more proper to evaluate the degree of upper vertebral slipping.

### Compliance with ethical standards

**Conflict of interest** None of the authors has any potential conflict of interest.

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