



# Response to: Zygapophyseal Joint Orientation and Facet Tropism and Their Association with Lumbar Disc Prolapse

Madhava Pai Kanhangad

*Department of Orthopaedics, Kasturba Medical College, Manipal Academy of Higher Education, Manipal, India*

Dear Editor,

We appreciate the authors for their interest in our paper and raising pertinent questions for further discussions on facet tropism and lumbar disc prolapse.

Firstly, we agree that the definition of the value of tropism should depend on the population being studied. Some authors have defined facet tropism as the standard deviation of the facet joint angles [1]. Our morphometric study demonstrated standard deviations of 6.38° and 6.67° at L4–L5 and L5–S1, respectively, and also showed similar values of facet joint angles compared with previous studies [2]. Similarly, our current study also demonstrated that facet tropism as small as 6° increases the likelihood of lumbar disc prolapse at L4–L5 and L5–S1 [3]. Therefore, it does not seem unreasonable to use the definition of facet tropism as provided by Vanharanta et al. [4].

## Conflict of Interest

No potential conflict of interest relevant to this article was reported.

## References

1. Karacan I, Aydin T, Sahin Z, et al. Facet angles in lumbar disc herniation: their relation to anthropometric features. *Spine (Phila Pa 1976)* 2004;29:1132-6.
2. Mohanty SP, Pai Kanhangad M, Kamath S, Kamath A. Morphometric study of the orientation of lumbar zygapophyseal joints in a South Indian population. *J Orthop Surg (Hong Kong)* 2017;25:2309499017739483.
3. Mohanty SP, Kanhangad MP, Kamath S, Kamath A. Zygapophyseal joint orientation and facet tropism and their association with lumbar disc prolapse. *Asian Spine J* 2018;12:902-9.
4. Vanharanta H, Floyd T, Ohnmeiss DD, Hochschuler SH, Guyer RD. The relationship of facet tropism to degenerative disc disease. *Spine (Phila Pa 1976)* 1993;18:1000-5.

Received Oct 15, 2018; Accepted Oct 18, 2018

Corresponding author: Madhava Pai Kanhangad

Division of Spine Surgery, Department of Orthopaedics, Kasturba Medical College, Manipal Academy of Higher Education, Manipal 576-104, Karnataka, India

Tel: +91-820-2922754, Fax: +91-820-2571934, E-mail: [kmadhavapai@gmail.com](mailto:kmadhavapai@gmail.com), [madhava.pai@manipal.edu](mailto:madhava.pai@manipal.edu)