

Response to Comment on Mittal et al: Defining the lateral edge of the femoroacetabular articulation: correlation analysis between radiographs and computed tomography

A. Mittal¹
J. D. Bomar²
M. E. Jeffords²
M-T. Huang³
D. R. Wenger⁴
V. V. Upasani⁴

Cite this article: Mittal A, Bomar JD, Jeffords ME, Huang M-T, Wenger DR, Upasani VV. Response to Comment on Mittal et al: Defining the lateral edge of the femoroacetabular articulation: correlation analysis between radiographs and computed tomography. *J Child Orthop* 2017;11:242. DOI: 10.1302/1863-2548.11.170035

Thank you very much for reading our paper and for your thoughtful comments. We appreciate your clarification regarding the original description of the lateral center edge angle as published by Wiberg in 1939.¹ As you clearly state, this confusion regarding using the lateral edge of the acetabulum as compared with the lateral edge of the sourcil remains pervasive throughout orthopedic literature. Wiberg eloquently described the edge of the sourcil as “where the bony support may be considered to end.” This has been misinterpreted as referring to the edge of the acetabulum. In the accompanying Figure 1, from his original paper the black dot adds additional

¹Department of Orthopedics, University of California, San Diego, CA, USA

²Department of Orthopedics, Rady Children's Hospital, San Diego, CA, USA

³National Cheng Kung University Hospital, Tainan City, Taiwan

⁴Department of Orthopedics, University of California, and Department of Orthopedics, Rady Children's Hospital, San Diego, CA, USA

Correspondence should be sent to Dr V. V. Upasani, Department of Orthopedics, Rady Children's Hospital, San Diego, CA, USA.
E-mail: vupasani@rchsd.org

confusion, as the edge of the sourcil (increased density in the supracetabular regions) appears to me more medial than depicted. Finding this distinct point becomes especially difficult with a dysplastic hip in which the sourcil is less distinct.

Three-dimensional computed tomography has been a significant advance in allowing us to understand the complex and varied deformities in pathologic conditions of the hip. We completely agree with your conclusion, however, that once we all start using the same landmarks to define pathology, treatment decisions and outcomes can be assessed more consistently.

Unfortunately, the value of exact identification of bony landmarks has always been somewhat problematic in younger children, where the radiolucent acetabular growth cartilage forms much of the acetabular rim. The future will move toward MRI clarification of the true acetabular rim as reported by Stelzener et al² and others. We look forward to continuing developments in this exciting field.

Received 29 January 2017; accepted 16 February 2017.

COMPLIANCE WITH ETHICAL STANDARDS

OA LICENCE TEXT

This article is distributed under the terms of the Creative Commons Attribution-Non Commercial 4.0 International (CC BY-NC 4.0) licence (<https://creativecommons.org/licenses/by-nc/4.0/>) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed.

REFERENCES

1. **Wiberg G.** Studies on dysplastic acetabula and congenital subluxation of the hip joint: with special reference to the complication of osteoarthritis. *Acta Chir Scand* 1939;83(Suppl 58):1-135.
2. **Stelzener D, Hingsammer A, Bixby SD, Kim YJ.** Can Radiographic Morphometric Parameters for the Hip Be Assessed on MRI? *Clin Orthop Relat Res* 2013;471:989-999.