• **Comment and Response** •

Comment on "Ultrasound reliability in detection of retinal tear in acute symptomatic posterior vitreous detachment with vitreous hemorrhage"

Siamak Sabour[1,2], Fariba Ghassemi[3]

[1]Department of Clinical Epidemiology, Shahid Beheshti University of Medical Sciences, Tehran 198353-5511, Iran
[2]Safety Promotion and Injury Prevention Research Center, Shahid Beheshti University of Medical Sciences, Tehran 198353-5511, Iran
[3]Department of Retina and Vitreous Diseases, Ocular Oncology, Farabi Eye Hospital, Faculty of Medicine, Tehran University of Medical Sciences, Tehran 1416753955, Iran
Correspondence to: Siamak Sabour. Chamran Highway, Velenjak, Daneshjoo Blvd, Department of Clinical Epidemiology, School of Public Health, Shahid Beheshti University of Medical Sciences, Tehran 198353-5511, Iran. s.sabour@sbmu.ac.ir
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Dear Editor,

We were interested to read the paper by Kuzmanović Elabjer *et al*[1]. The purpose of the authors was to assess ultrasound reliability in detecting retinal tears in patients with acute symptomatic posterior vitreous detachment (ASPVD). They performed transpalpebral ultrasound of the eye and the orbit followed by fundus examination initially and in 6wk period. They reported that sensitivity of ultrasound examination was 100%, specificity 92%, positive predictive value 62% and negative predictive value 100%. Ultrasound proved to be a reliable and accurate method for detection of retinal tears in ASPVD.

It is crucial to know that reliability (precision, repeatability) and validity (accuracy) are two completely different methodological issues[2]. Sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) as well as likelihood ratio positive and negative (LR+ and LR-) are among the estimates to assess validity (accuracy) of

a diagnostic test and have nothing to do with reliability[2-8]. Moreover, our approach to assess reliability is individual based instead of global average. Reliability (precision) as different methodological issue should be assessed using appropriate tests. For qualitative variables, weighted kappa can be applied with caution. Regarding quantitative variables, Intra class correlation coefficient (ICCC) and Bland Altman plot are among well-known approaches[2-8].

They concluded that given the high sensitivity and negative predictive value, B-scan ultrasound is reliable. Such conclusion should be supported by the above mentioned methodological and statistical issues on reliability and validity. Otherwise, in clinical practice, mismanagement of the patients may occur.

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Author Reply to the Editor

Dear Editor,

We are thankful for the valuable comments and interest in our manuscript. At no point, the authors claimed that they had calculated and statistically presented reliability of the test. The authors have used the term reliable to describe something clinically applicable and useful, although statistically, the term valid would be more accurate.

Biljana Kuzmanović Elabjer

University Eye Clinic, Faculty of Medicine, University Josip Juraj Strossmayer in Osijek, University Hospital "Sveti Duh", Sveti Duh 64, Zagreb 10000, Croatia