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COMMENTARY

Commentary on: Predictive value of health-related quality of life in progression of disability and depression in persons with multiple sclerosis: a 3-year study

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To the Editor,

Tepavcevic et al. [1] have provided interesting data in their recent article. Interestingly, a number of new biomarkers may help in detection and assessment of depression.

One emerging marker is platelet GSK3B activity. Patients with severe depression tend to demonstrate higher GSK3B activity [2]. Similarly, patients with co-existing impairment of cognition secondary to depression demonstrate higher GSK3B activity. Assessment of platelet adenylyl cyclase activity is another way to diagnose depression. In general, altered platelet adenylyl cyclase activity is observed in patients with more severe degree of depression [3].

Another emerging marker is interleukin-18. It is especially sensitive in detecting post-stroke depression. Serum interleukin-18 is usually measured a week after the stroke [4]. Interestingly, the risk of depression even half a year after the stroke can be predicted by assessing serum interleukin-18 levels. Beta-arrestin signaling complex is another emerging biomarker of depression [5]. Assessment of thyroid peroxidase antibody level is another way to assess for possible depression. This is an especially sensitive test to predict the chances of postpartum depression [6]. Similarly, elevated copper levels are seen in patients with depression making it a possible biomarker. Levels as high as 21 % above normal have been seen in depression patients [7]. Similarly, assessment of serum zinc levels helps in detecting treatment resistance in patients with depression [8].

The above examples briefly highlight the emerging new biomarkers of depression. Hopefully, the coming few years will see increased application of these markers.

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