

## ALPHA-FOETOPROTEIN: AN INACCURATE TEST FOR SURVEILLANCE OF POST-TREATMENT RECURRENCE OF HEPATOCELLULAR CARCINOMA

I read the article by Chang et al with interest.<sup>(1)</sup>

Alpha-foetoprotein (AFP) has long been recognised as an inadequate screening and surveillance test for hepatocellular carcinoma (HCC), as it can be elevated for a variety of reasons other than HCC, including active viral hepatitis B or C, hepatic necrosis or acute hepatitis.<sup>(2)</sup> Besides, not all HCC produce AFP; hence, a normal AFP does not exclude the presence of HCC.<sup>(3)</sup> In addition, the National Comprehensive Cancer Network guidelines recommend using serial ultrasonography as a surveillance method for post surgery HCC recurrence. AFP was recommended as a surveillance test only if the pre-surgery level was elevated.<sup>(4)</sup> Similarly, the American Association of Study of Liver Diseases does not recommend using AFP as a surveillance test for HCC in patients at risk of HCC. It specifically states that post-resection AFP is unreliable in predicting recurrence, even if the pre-resection level is elevated.<sup>(5)</sup>

In a previous study that evaluated 35 HCC patients undergoing living donor liver transplant at a single centre over a six-year period, Majeed et al found that at the time of transplant, 6/35 (17%) patients had AFP values within the normal range.<sup>(6)</sup> In these patients with normal AFP before surgical resection or transplant, it would be futile to use AFP as a surveillance test after the surgery. In the current study, Chang et al found that among the 34 patients who had HCC recurrence, only 17/26 (65%) had AFP values on the upward trend during follow-up.<sup>(1)</sup> Thus, for the study to be meaningful, the authors ought to limit their analysis to those with elevated pre-treatment AFP. HCC patients with normal AFP at baseline would most likely have normal AFP even if HCC has recurred.

Finally, the American Cancer Society defines cancer screening as test(s) performed to identify early cancer in an asymptomatic person, while surveillance refers to testing patients at high risk of developing cancer, such as those who have previously had the condition.<sup>(7)</sup> The current study evaluated subjects who already had HCC, so the term "surveillance" of HCC post surgery would be more appropriate than the term "screening".

Yours sincerely,

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