Comment on: clinical value of circulating tumor DNA for patients with epithelial ovarian cancer

Eurasian Clinical and Analytical Medicine *Letters to Editor*

Circulating tumor DNA

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Abstract

The purpose of this letter is to highlight the potential clinical effects and importance of circulating tumor cells and circulating tumor DNA (ctDNA) in oncology patients undergoing PRP (Platelet-Rich Plasma) therapy. ctDNA and circulating tumor cells are considered important biomarkers of disease progression and minimal residual disease in solid tumors. With the increasing use of PRP and exosome-based therapies in cosmetic and regenerative medicine in recent years, the theoretical risk of contamination with tumor material from current or past malignancies, despite these biological products being derived from the patient's own blood, has been raised. The long-term oncological safety of these applications is not yet clear. On the other hand, the potential role of ctDNA and PRP-derived components in cancer surveillance and personalized oncology treatments is being investigated. Until sufficient long-term evidence is available, it would be appropriate to avoid such biological and cosmetic interventions in patients with a history of cancer or to prefer individualized treatment plans.

Letter to the Editor

The purpose of this letter is to highlight the potential clinical implications and importance of circulating tumor cells and DNA in oncology patients undergoing PRP (Platelet-Rich Plasma). The presence of circulating tumor DNA (ctDNA) and tumor cells can be a marker of disease progression and minimal residual disease in solid tumors, similar to hematological malignancies [1].

In recent years, the use of PRP and exosome-based therapies in cosmetic and regenerative medicine has increased. While these products are derived from patients' own blood and subjected to centrifugation and purification, the theoretical risk of contamination with tumor-derived material from existing or past malignancies remains [2]. Some studies have shown that these biologics may not have adverse effects in the short term; however, the long-term oncological safety of such treatments remains uncertain and requires further evaluation [3].

Additionally, many researchers are considering the potential role of circulating tumor DNA and PRP-derived components in cancer treatment monitoring and personalized oncology therapy [4]. However, until sufficient long-term evidence is available, it would be prudent to avoid such biologic/cosmetic interventions or plan individualized treatment for patients with a history of cancer.

Ethical Approval

This study did not require ethical approval according to the relevant guidelines.

Scientific Responsibility Statement

The authors declare that they are responsible for the article's scientific content, including study design, data collection, analysis and interpretation, writing, and some of the main line, or all of the preparation and scientific review of the contents, and approval of the final version of the article.

Animal and Human Rights Statement

No animal or human studies were carried out by the authors for this article.

Data Availability Statement

The datasets used and/or analyzed during the current study are not publicly available due to patient privacy reasons but are available from the corresponding author on reasonable request.

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Conflicts of Interest

None.

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