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"Liquid Biopsy" – Is it a Feasible Option in Colorectal Cancer?

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Abstract
It is important for surgeons to keep up with improvements both in and outside their field. As medicine evolves, new techniques appear, and oncology is one of the main beneficiaries. "Liquid biopsy" is one of the most recent domains of interest in oncology, as it may provide important details regarding the characteristics of the main tumor and its metastases. Malignant cells are in a continuous dynamic, which makes the initial diagnostic biopsy and the pathological specimen evaluation insufficient in the late evolution of the disease, when relapse or metastases may appear. The fact that the healthcare provider is able to find out additional information about the tumor at a given time, by evaluating a blood sample to obtain a "liquid biopsy" is of utmost importance and gives multiple potentially usable data. There are three means of obtaining biological material that may be used as "liquid biopsy": evaluation of circulating tumor cells, circulating tumor DNA and exosomes. The most intensely studied entity is that of circulating tumor cells, with different applications, amongst which the most important, at present time, is the prognostic value that has important demonstrated implications, not only in breast and prostate cancer, but also in colorectal cancer. Although surgery will, most certainly, not be replaced by other treatments when aiming for a curative approach to rectal cancer, it is important for the surgeon to know information about complementary fields, one of which is comprised by "liquid biopsy".
Key words: colorectal cancer, liquid biopsy, circulating tumor cells, circulating tumor DNA, exosomes