

Circulating tumor cells in solid tumor in metastatic and localized stages.

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The aim of this study was the detection of circulating tumor cells (CTC) in three tumor types of epithelial origin.

PATIENTS AND METHODS: Four hundred and thirty-eight patients with breast cancer (56.2% localized and 43.8% metastatic), 195 with colorectal tumors (84.1% localized and 15.9% metastatic) and 50 with prostate cancer (52% localized and 48% metastatic) took part in this study. CTC quantification was performed using the CellSpotter Analyzer (Veridex LLC).

RESULTS: 31.5% of patients with cancer had $>$ or $=2$ CTCs/7.5 mL but none of the healthy volunteers were above this level ($p < 0.001$). Among patients with metastatic disease, 62.3% of them had $>$ or $=2$ CTCs/7.5 mL but only 14.0% of those with localized disease were above this level ($p < 0.001$). The presence of CTCs were correlated to stage in the three studied tumor types and no differences in the number of cells were found between them.

CONCLUSION: The presence of more than 2 CTCs/7.5 ml is a frequent event in metastatic cases. In particular, patients with localized disease who have more than 2 CTCs/7.5 ml should be carefully studied to determine the possible prognostic and predictive value of this finding.

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