

This is a provisional PDF only.



ISSN: 0029-540X

e-ISSN: 2300-2115

High CA 19.9 concentration as an diagnostic dilemma in gastrointestinal cancer survivors

Authors: Aleksandra Grela-Wojewoda, Mirosława Puskulluoglu, Joanna Anioł, Marek Ziobro

DOI: 10.5603/njo.99118

Article type: Pictures in Oncology

Submitted: 2024-01-25

Accepted: 2024-03-05

Published online: 2024-06-04

How to cite:

Grela-Wojewoda A, Puskulluoglu M, Anioł J, et al. High CA 19.9 concentration as an diagnostic dilemma in gastrointestinal cancer survivors. NOWOTWORY J Oncol 2024; 74 (Ahead of print).

This article has been peer reviewed and published immediately upon acceptance. It is an open access article, which means that it can be downloaded, printed, and distributed freely, provided the work is properly cited.

High CA 19.9 concentration as an diagnostic dilemma in gastrointestinal cancer survivors

Aleksandra Grela-Wojewoda¹, Mirosława Puskulluoglu¹, Joanna Anioł², Marek Ziobro¹

1. *Department of Clinical Oncology, Maria Skłodowska-Curie National Research Institute of Oncology, Krakow Branch, Krakow, Poland*
2. *Department of Radiology, Maria Skłodowska-Curie National Research Institute of Oncology, Krakow Branch, Krakow, Poland*

In March 2021, an elevated concentration of CA 19.9 (1177.95 U/ml) was detected in a 71-year-old patient during a routine check-up. The remaining biochemical parameters, including the CEA marker, and the blood count, were within normal limits. The patient remained asymptomatic. In the previous year (January 2020) the patient underwent a right-sided hemicolectomy as a curative treatment for partially mucinous G2 adenocarcinoma (pT4bN0R0LV0). Based on the elevated concentration of CA 19.9, suspicion was raised regarding primary biliary carcinoma or dissemination of CRC. Abdominal and pelvic computed tomography (CT) in May 2021 revealed a hepatic lesion, necessitating differentiation between cholangiocarcinoma and atypical hemangioma (fig. 1 A-C). After 22 months, a follow-up CT did not confirm the presence of malignancy and stable CT picture (fig. 1 D). Concurrently, CA 19.9 concentrations, initially elevated in multiple measurements, exhibited a decrease, returning to normal levels by June 2021. At present, the patient remains asymptomatic, with imaging and biochemical test results within the normal range. This clinical case shows that CA 19.9 marker concentration test is not intended for screening purposes, but is useful for monitoring the treatment and follow-up of patients with gastrointestinal malignancies who demonstrated elevated levels prior to initiating therapy. In addition a high concentration of Ca 19.9 is not a pathognomonic symptom of gastrointestinal cancers. Numerous non-neoplastic conditions may manifest with elevated levels of CA 19.9 [1, 2].

Article information and declarations

Conflict of interest

None declared

Aleksandra Grela-Wojewoda

Maria Skłodowska-Curie National Research Institute of Oncology

Krakow Branch Department of Clinical Oncology

ul. Garncarska 11

31-115 Kraków, Poland

e-mail: agw10@interia.pl

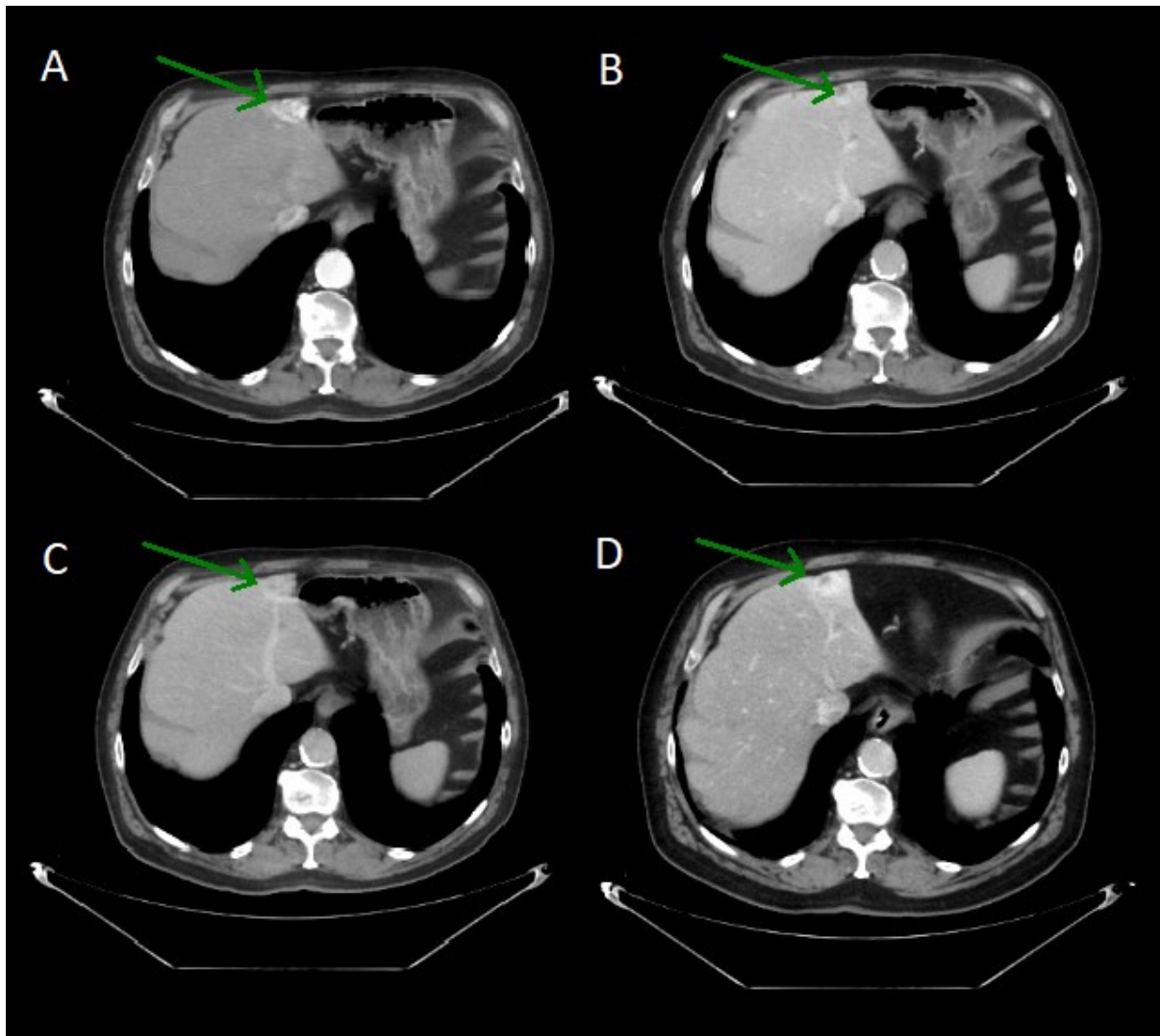
Received: 24 Jan 2024

Accepted: 5 Mar 2024

References

1. Dembińska-Kieć, A., Naskalski, J. W., & Solnica, B. (2017). *Diagnostyka laboratoryjna z elementami biochemii klinicznej*. Edra Urban & Partner.
2. Vogel A, Cervantes A, Chau I, Daniele B, Llovet JM, Meyer T, Nault JC, Neumann U, Ricke J, Sangro B, Schirmacher P, Verslype C, Zech CJ, Arnold D, Martinelli E. Hepatocellular carcinoma: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. *Ann Oncol*. 2019 May 1;30(5):871-873.

Figure 1. Abdominal contrast-enhanced computed tomography



In the liver, beneath the frontal capsule, there is an oval lesion that enhances after the administration of contrast medium intravenously. This enhancement is observed in the arterial phase (A), followed by a "wash out" in the portal (B) and venous phases (C). The lesion should be differentiated between a metastatic or primary liver tumor and an atypical hemangioma. A follow-up abdominal computed tomography (D) performed after 22 months revealed an oval lesion of the same size and enhancement pattern