Paroxetine may cause increase in carcinoembryonic antigen (CEA)

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Introduction

Carcinoembryonic antigen (CEA) is mostly used to detect early recurrences after surgery in patients with colorectal cancer [1]. In this report, we present a case in which paroxetine use caused increase in CEA. In literature, a similar case has not been previously presented.

Case

A 61-year-old male patient, married, with a child, suffered two depressive episodes, with the first one occurring 15 years ago and the second one 7.5 years ago. After the second episode, he received paroxetine treatment for a year, but 6 months after the cessation of treatment, a third depressive episode occurred, and paroxetine was started again at 20 mg/day. After a response was obtained, he continued to use 10 mg/day. Six years after the last episode, in routine controls, CEA levels began to increase. CEA level was 20 in April 2008, 27 in June 2008 and 34 in September 2008. A whole-body cancer screening was performed. However, clinical examination and laboratory tests [computed tomography (CT) and ultrasound (US)]

did not reveal cancer. Therefore, in this patient, the increase in CEA was attributed to paroxetine, and the treatment was discontinued. A month later, CEA level became 17.

Discussion

CEA increase during paroxetine use may be related to the increase in serotonin, serotonin–carcinoid syndrome relationship, or the effect on laboratory methods, and the cause is not known yet [2, 3]. During the evaluation of cases with increased CEA levels, paroxetine use should be investigated.

References

1. Fletcher RH (1986) Carcinoembryonic antigen. *Ann Intern Med* 104(1):66–73
2. Seshamani M, Einhorn E, Mirza N (2009) Atypical carcinoid of the larynx and potential complications of the carcinoid syndrome: a case report. *Ear Nose Throat J* 88(1):E1
3. Simbera Z, Balon R (2005) Carcinoid tumor, selective serotonin reuptake inhibitors, and diarrhea. *Psychosomatics* 46(1):88–89

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