

Letter to the Editor

Carcinoembryonic antigen levels in colorectal cancer: Are we too preoccupied?

Sir,

The dependence on carcinoembryonic antigen (CEA) levels both in the pre-operative as well as post-operative follow-up period in the management of colorectal cancer has remained a matter of debate world-wide. Are we too dependent on the CEA levels and what are the questions that still remain unanswered, is what we would like to draw the attention of the oncological fraternity to, through our letter.

CEA, an oncofetal antigen, ever since its detection, has become one of the most used markers in colorectal cancer to the extent of influencing management protocols as well.^[1]

CEA as a baseline pre-operative investigation and subsequent 3 monthly CEA estimation in the post-treatment phase is an accepted standard of care.^[1,2]

However, there are still several questions that remain unanswered:

Do the pre-operative CEA levels corroborate with the severity/stage/extent of colorectal disease?

Does a pre-treatment baseline CEA level also corroborate with post-treatment levels?

If not, then how can post-operative 3 monthly CEA be used as a marker of recurrence in those patients with low to normal pre-operative levels? In these, is there a role of investigations such as a routine positron emission tomography (PET)-computed tomography (CT) scan or earlier CT scans/colonoscopies?

Huh *et al.*^[3] reported that pre-operative CEA levels (cut-off 5 ng/mL) were significant only for TNM stage II cancers. However, others showed that the pre-operative CEA level was an independent predictor of disease-free survival only in stage III.^[3]

A novel concept put forth by Jeon *et al.*^[4] is of individualization of cut-off values of preoperative CEA levels, seemingly a more practical approach to management.

Multicenter randomized trials are thus mandatory to bridge this gap in the hiatus of knowledge.

Until and unless these questions are answered, our reliance on CEA levels (albeit supportive) would continue to remain. As said, it is always better to “err on the side of caution,” especially in the oncology setup.

Aggarwal G, Roy MK, Banerjee S

Department of Surgical Oncology (GI Surgery), Tata Medical Center, Kolkata, West Bengal, India

Correspondence to:

Dr. Gaurav Aggarwal, E-mail: drgaurav1981@rediffmail.com

References

1. Duffy MJ. Carcinoembryonic antigen as a marker for colorectal cancer: Is it clinically useful? *Clin Chem* 2001;47:624-30.
2. Huh JW, Oh BR, Kim HR, Kim YJ. Preoperative carcinoembryonic antigen level as an independent prognostic factor in potentially curative colon cancer. *J Surg Oncol* 2010;101:396-400.
3. Park YA, Lee KY, Kim NK, Baik SH, Sohn SK, Cho CW. Prognostic effect of perioperative change of serum carcinoembryonic antigen level: A useful tool for detection of systemic recurrence in rectal cancer. *Ann Surg Oncol* 2006;13:645-50.
4. Jeon BG, Shin R, Chung JK, Jung IM, Heo SC. Individualized cutoff value of the preoperative carcinoembryonic antigen level is necessary for optimal use as a prognostic marker. *Ann Coloproctol* 2013;29:106-14

Access this article online

Quick Response Code:



Website:

www.indianjancancer.com

DOI:

10.4103/0019-509X.175344