AB137. SOH21AS049. Audit to evaluate the use of the tumour marker CEA in a level 3 hospital

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Background: Tumor markers play an important role in cancer cases and their application in practice needs an understanding of its pathophysiology, testing techniques, range of values and their role in any given malignancy. The appropriate use of tumor marker testing is facilitated by national and international guidelines, inappropriate use increases both the laboratory workload and cost. In this study, we evaluated the appropriateness of ordering the tumour marker carcinoembryonic antigen (CEA) in a Model 3 general hospital.

Methods: A single centre retrospective audit was conducted between 1st and 31st October 2020. Patients demographics and admitting consultants details were obtained through HSE online Lab Web Enquiry system. Files were reviewed for indications using the guidelines by the Association of Clinical Biochemists Ireland (ACBI).

Results: A total of 52 tests were ordered over the month, 38 (73.1%) of these tests were ordered correctly following ACBI guidelines. The remaining 14 (26.9%) tests were ordered inappropriately. Fifty percent (26/52) of the total tests were ordered by oncology, 31% (16/52) by General Surgeon and the remaining 19% (10/52) by other specialities. No inappropriate tests were ordered by Oncology, inappropriate tests ordered by General Surgery were 35.7% (5/14) and 64.3% (9/14) by other Specialities.

Conclusions: Nearly 26% of the tests were ordered inappropriately and did not comply with published ACBI guidelines and cost 294 euros. The tumour marker CEA is not useful as the initial work up of nonspecific complaints. Its main use is surveillance after curative resection and for monitoring treatment for patients with advanced colorectal cancer.

Keywords: Carcinoembryonic antigen (CEA); Association of Clinical Biochemists Ireland (ACBI)

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Footnote

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