The added benefit of contrast-enhanced CT in evaluation of incidental FDG-avid colon lesions

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Dear Sir,

We were very impressed from the outset when reading the paper published by Kirchner et al. recently [1]. It suggested a much higher incidence of detection on positron-emission tomography (PET) scan combined with computed tomography (CT) with fluorodeoxyglucose (FDG) for cancerous and precancerous lesions in the bowel and a greater degree of diagnostic accuracy than had been found in works which did not have the assistance of CT with contrast enhancement and much higher resolution [2–6]. For example, in our own study [7], scans were performed without contrast, and the CT component was acquired with a scanner with 16-slice capability. Would the authors ascribe the discrepancy purely to the difference in CT technology? Or are there other factors found to be of significance?

On further analysis, we found that the positive predictive value (PPV) was similar between the study by Kirchner [1], ours [7], and other studies [2–6] also without the assistance of contrast-enhanced CT. Agress and Cooper [2] and Kamel et al. [3] were omitted as neither the number of incidentally detected colonic lesions nor the proportion followed up was clearly documented (and hence the PPV could not be calculated).

The PPV calculated by Gutman et al. [4], Israel et al. [5], Even-Sapir et al. [6], and our study [7] were 61%, 46%, 62%, and 55%, respectively. The PPV cited in their work [1] was 50%. In that case, how much a difference did diagnostic CT really make?

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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