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Opportunistic CT Screening Should Become Routine in Everyday Clinical Practice

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Abstract

Computed tomography (CT) scans contain valuable clinical information beyond the primary reason for imaging. I believe opportunistic CT screening should become a routine part of clinical practice because it enables early detection of conditions such as osteoporosis, coronary artery disease, hepatic steatosis, and sarcopenia without requiring additional imaging or radiation exposure. Advances in artificial intelligence and automated image analysis have made extracting these biomarkers increasingly practical. Although concerns regarding workflow and incidental findings exist, they should not prevent the adoption of an approach that enhances preventive healthcare and maximizes the diagnostic value of every CT examination.

Keywords: Opportunistic CT; Preventive imaging; Artificial intelligence; Body composition; Precision medicine

Introduction

Every CT scan tells more than one story. Yet, in routine practice, we often focus only on the clinical question that prompted the examination and overlook other valuable findings. I believe this should change. Opportunistic CT screening offers an effective way to identify patients at risk of chronic diseases without exposing them to additional radiation or requiring another imaging appointment. Routine CT examinations can reveal clinically meaningful information about bone mineral density, coronary artery calcification, liver fat, muscle mass, and visceral adiposity. These imaging biomarkers are closely linked to osteoporosis, cardiovascular disease, metabolic syndrome, and frailty. Identifying such findings during routine reporting provides an opportunity for earlier intervention and preventive care, improving long-term patient outcomes while making better use of existing imaging data [1].

The greatest advantage of opportunistic screening is its efficiency. Since the CT scan has already been performed, extracting additional biomarkers does not increase radiation exposure or patient inconvenience. Modern artificial intelligence tools can automatically quantify many of these measurements, reducing interpretation time and improving consistency. Rather than adding complexity, these technologies can support radiologists in delivering more comprehensive reports. Some clinicians worry that routine opportunistic screening may increase workload or lead to unnecessary follow-up investigations. These concerns are valid but manageable. Standardized reporting guidelines and validated AI software can help prioritize clinically significant findings while minimizing unnecessary referrals. Radiology has successfully adapted to technological advances before,

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and this is another opportunity to enhance patient care [2].

Conclusion

Opportunistic CT screening should become a routine component of everyday clinical practice. The information already exists within images acquired for other clinical purposes; we simply need to use it more effectively. With standardized reporting and AI-assisted analysis, radiologists can play a greater role in preventive medicine while improving the overall value of CT imaging.

References

1. Pickhardt PJ (2022) Value-added opportunistic CT screening: State of the art. Radiology 303(2): 241-254.

2. Pickhardt PJ, Graffy PM, Perez AA, Lubner MG, Elton DC, et al. (2021) Opportunistic screening at abdominal CT: Use of automated body composition biomarkers for added cardiometabolic value. RadioGraphics 41(2): 524-542.

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