Peer Review File

Article Information: https://dx.doi.org/10.21037/cdt-23-79

Reviewer A:

Very nice and extensive literature review article on important, very often overlooked, hot topic. A few adjustments/ additions could be made:

1. When talking about calciumscore, different terms are being used which is unclear and confusing: e.g. line 89. "total (Agatston) calcium score" and line 103. and further on in the text "CAC score". I think the same is meant, but this should be further explained/ clarified in line 89.

Reply Comment 1:

Thanks for pointing out this discrepancy. We have changed "total (Agatston) score" to "total CAC score".

2. Paragraph line 95, concerning CAC detection: There are many ways to quantify CAC on CT, of which only 2 are mentioned. SIS and CAD-RADS 2.0 P-scoring could be included (doi: 10.1016/j.jcct.2022.07.002.). Maybe worthy as well to include that there is no significant difference in scoring systems for amount of CAC; i.e. visual scoring by an experienced rater equals Agatston ca score (as stated in the mentioned reference 14. Chiles et al.).

Reply Comment 2:

Thanks for this comment. We have added the information for the SIS as follows " Additionally, segment involvement score (SIS) can be used for scoring of CAC. It is based on assigning 1 to each coronary artery segment with coronary calcification." Since P scoring is specific to CAD-RADS and coronary CTA and we are discussing CAC scoring on Chest CTs, we opted not to have P scoring included in the text. The absence of significant discordance between different scoring systems also mentioned as "Multiple studies have shown high concordance between CAC score in a routine chest CT and ECG-gated cardiac CT.".

3. https://doi.org/10.1016/j.jacr.2018.04.029 and https://doi.org/10.1259/bjr.20200894 give practical advice on management of incidental findings. Could be a nice additional paragraph/ table.

Reply Comment 3:

Thanks for this valuable comment. All these recommendations have been described in a single paragraph including provided new guidelines as follows.

"The importance of these incidental findings has now been recognized and incorporated into guideline documents endorsed by several different societies. SCCT/STR 2016 guidelines for calcium scoring and subsequent Coronary Artery Calcium Data and Reporting System recommends reporting calcium scoring, mitral annulus calcification, thoracic aortic calcification in all routine non-gated chest CT scans (33,34). Similarly, a consensus statement

from the British Society of Cardiovascular Imaging/British Society of Cardiac Computed Tomography (BSCI/BSCCT) and British Society of Thoracic Imaging (BSTI) recommends reposting of incidental coronary artery, aortic valve, mitral, myocardial and pericardial calcifications in conjunction with further management recommendations (154)_. Finally, American College of Radiology recommends reporting of incidental CAC on routine chest CT scans by using either Agatston or visual scoring methods (155)."

4. line 229. typo THE
Reply Comment 4:
The typo has been corrected as "the".

5. line 299. Is there a way to grade epicardial fat visually? Separate software is not going to work for an incidental finding in daily practice of a general radiologist

Reply Comment 5:
There is no data in the literature regarding visual scoring of Epicardial adipose tissue. Manual measurements of epicardial adipose tissue thickness have been proposed but have shown to be less reproducible and do not correlate well with CAD. This information has been added to the text. "Although no visual scoring of EAT is present, manual measurement of EAT thickness on imaging has been attempted to avoid additional software use. However, EAT volumetry is calculated by dedicated software, which correlates better with CAD extent than manual bidimensional measurements of EAT thickness and is more reproducible."

Reviewer B:
1. Please use the full name of CT in the title.
A1: Full name of CT has been added in title.

2. Please highlight the novelty of this review in the introduction. What does this review add to existing knowledge? How does this review differ from previous reviews?
A2: This article provides a very comprehensive and detailed discussion and comparison of available current literature regarding incidental cardiovascular abnormalities and their prognostic and clinical implications.

3. Kindly include in your methods the types (e.g., original article, review, case report, etc.) of articles included.
A3: The types of the articles have been added to method section, they are also mentioned in the table 1 summarizing the method.

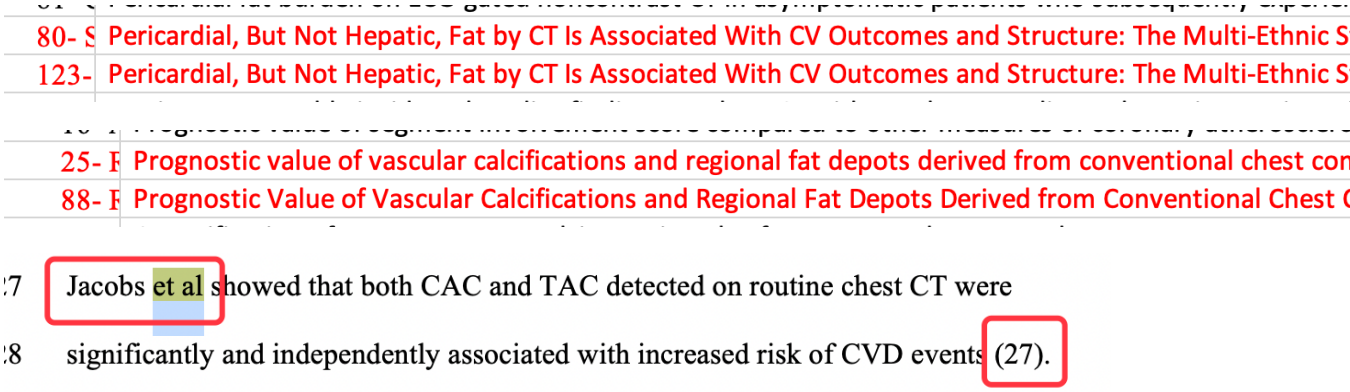
4. We suggest authors also consider discussing these included studies in depth with an objective perspective. Specifically, which are more trustworthy while others are not? Have authors considered some (even the simplest/most obvious) limitations/quality of this evidence?
A4: Thank you for the recommendation. We would love to do this, but a critical review of each of these articles would be extremely challenging and even impossible, given that we have a

word limit. We have included more than 150 articles in this review, and it will be hard to specify which of them were trustworthy and which are not. Hence, unfortunately we do not think it will be possible to do this.

5. Though it is a review, a separate section on the STRENGTHS and LIMITATIONS of this review is highly recommended. We think this could promote a more intellectual interpretation.
A5:A new section was added before the Conclusions.

6. Some sentences in the manuscript need paraphrasing instead of directly using the same wording or simple word switching. Please rephrase the place (pages 12-15) highlighted in the Similarity Report.
A6: These sections have been rephrased.

7. ref 80 and 123, ref 25 and 88 are duplicate. Please revise.



After you revise the above reference list, please recheck and revise all the citations in the main text to make sure the names are corresponding with the reference number.
A7: The duplicate references have been deleted and all reference list was renumbered both in the main text and references sections. All references have been checked

8. Add citation for the following sentence if possible.
Multiple studies have demonstrated that reporting the abovementioned incidental cardiac findings helps to establish the diagnosis, alter management, and provide prognostic information.
A8: Appropriate references were added.