

March 3, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: Manuscript\_final.doc).

Title: Atrium of stone: A case of confined left atrial calcification without hemodynamic compromise.

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Name of Journal: **Atrium of stone: A case of confined left atrial calcification without hemodynamic compromise.**

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The manuscript has been improved according to the suggestions of the reviewer

1. Addition of author (pg.1)
  - a. Addition of Aadil Mubeen Lodhi as 2<sup>nd</sup> author
2. Word change from "with in" to "within." (pg. 5)
  - a. From: Calcium deposition is significantly confined with in the walls of the left atrium with no involvement of the mitral valve or untoward effects on hemodynamics.
  - b. To: Calcium deposition is significantly confined within the walls of the left atrium with no involvement of the mitral valve or untoward effects on hemodynamics.
3. Word change from "Or" to "Our." (pg.6)
  - a. From: "Or case presentation is unique in that all of the walls of the left atrium...'
  - b. To: Our case presentation is unique in that all of the walls of the left atrium...'
4. Removal of a period. (pg.6)
  - a. From: Mitral annular calcification is known to cause caseous necrosis and is usually occurs with calcification of posterior mitral annulus<sup>11,12</sup>..
  - b. To: Mitral annular calcification is known to cause caseous necrosis and is usually occurs with calcification of posterior mitral annulus<sup>11,12</sup>..
5. Addition of "majority." (pg. 3)
  - a. From: "...consistent with calcification of the left atrium and mild calcification of the ascending aorta (Figure 2)."
  - b. To: "...consistent with calcification of majority of the left atrium and mild calcification of the ascending aorta (Figure 2)."
6. Addition of the use of porcelain and coconut atrium. (pg. 4)

- a. Addition of "In cases where an entire atrium is involved, it is often referred to as a "coconut"<sup>29</sup> or "porcelain atrium"<sup>30</sup>."
7. Addition of past medical history of patient (pg.3)
  - a. Addition of "...and patient had no history of tuberculosis or a positive PPD."
8. Addition of patient history (pg.3)
  - a. Addition of 10. "A transesophageal echocardiogram was not performed in this case."
9. Spelling correction (pg.5)
  - a. From: "McCaulum's patch"
  - b. To: "MacCallum's patch"
10. Addition of word (pg.3)
  - a. Addition of "however"
11. Description of CT view of aorto-mitral region from patient imaging (pg.3)
  - a. Addition of "The CT unfortunately did not show the aorto-mitral continuity well."
12. Rewording discussion (pg.6)
  - a. From "Mitral annular calcification is known to cause caseous necrosis and is usually occurs with calcification of posterior mitral annulus."
  - b. To: "Caseous necrosis is known to cause mitral calcification, usually occurring along the posterior annulus."
13. Addition of patient's EKG results (pg.2)
  - a. Addition of "Electrocardiogram (EKG) showed normal sinus rhythm."
14. Addition of normal value of left atrium size (pg.3)
  - a. Addition of "(Normal left atrial size by index is  $<29 \text{ cm}^2/\text{m}^2$ )<sup>13</sup>".
15. Addition of explanation in discussion of why our patient's calcification was a result of dystrophic calcification and not a result of metastatic calcification. (pg.4)
  - a. Addition of: "Calcification seen in patients is typically either a product of metastatic calcification or dystrophic calcification. Metastatic calcification is typically seen in patients with a disturbance of Calcium and Phosphorus metabolism, often due to renal dysfunction. In our patient, although the intact parathyroid hormone level was elevated on previous workup for renal transplant, the pattern of calcification was that of a dense, finely speckled pattern. This indicates that the calcification in the left atrium is a product of dystrophic calcification and not that of metastatic calcification."
16. Addition of gene determinants of dystrophic calcifications (pg.5)
  - a. Addition of: "There are several genes that have been linked to dystrophic cardiac calcification, including but not limited to the ATP-binding cassette transporter subtype 6 (Abcc6) gene which was recently found to mediate myocardial necrosis and calcification<sup>14-16</sup>, the Adiponectin (Adipoq) gene which was linked to calcification of the aortic median<sup>17, 18</sup>, the alpha2-HS-glycoprotein/fetuin (Ahsg) gene which has been linked to calcification of coronary artery plaques in patients with type II diabetes<sup>19,20</sup>, the ectonucleotide pyrophosphatase/phosphodiesterase1 (Enpp1) gene which has been linked to increased aortic arch calcifications in patients with type II

diabetes and higher coronary calcification scores in patients with End Stage Renal Disease<sup>21-24</sup>, and the Osteoprotegerin (Opg) gene which has been linked to increased risk for coronary artery disease<sup>25-28</sup>."

17. Addition of point on endoatrioectomy (pg.6)
  - a. Addition of "Total endoatrioectomy of a calcified left atrium has been shown to be a technique with limited morbidity, however, not much follow up of atrial compliance has been done in patients who undergo this procedure in order to quantify improvement<sup>31</sup>."
18. Addition of references. (pg. 9 -13)
  - a. Addition of references 13-31.
19. Figure 3- CXR added. Reading commented. No prior history of TB.

Thank you again for publishing our manuscript in the World Journal Clinical Cases

Sincerely yours,



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