

## Myocardial Calcification in a Patient with End-Stage Renal Disease

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Disclosure: Nothing to report.

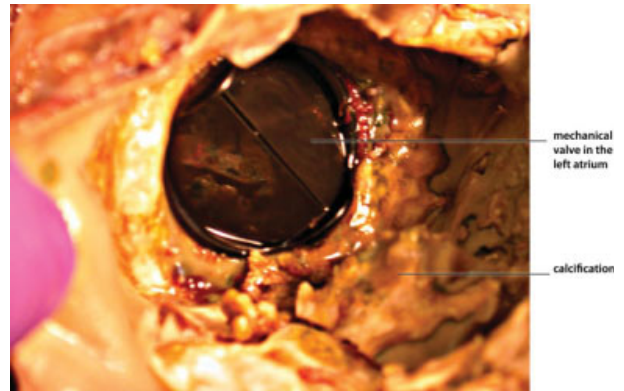
Myocardial calcification is very rare and has been associated with metastatic calcium deposition. A 57-year-old woman with end-stage renal disease (ESRD) due to hypertension on peritoneal dialysis, coronary artery disease, mechanical valve from mitral stenosis without history of rheumatic disease, atrial fibrillation, and a positive tuberculin skin test presented with tuberculous peritonitis (culture confirmed) and calcifications of her heart. Her chest film showed a retrocardiac calcified lesion (Figure 1). Chest computed tomography (CT) showed cardiac hypertrophy with calcification of the left atrium and ventricle (Figure 2). She began antituberculosis medications but she died 1 month later. At autopsy, the cardiac tissue confirmed endocardial and myocardial calcifications without tuberculum bacilli (Figure 3).



**FIGURE 1.** Chest film showing the 7-cm “O-ring”-shaped calcification in the area of the left atrium.



**FIGURE 2.** Chest CT showing a hypertrophic heart with ring calcification extending from the left atrium to the left ventricle.



**FIGURE 3.** Autopsy of the left atrium shows massive calcification of the endocardium and areas of the myocardium. The mechanical mitral valve is visible.

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Her ESRD led to an elevated calcium-phosphate product, which more commonly causes vascular calcifications (calciophylaxis), but can lead to calcification of the cardiac tissue.<sup>1</sup> Some other possible causes include myocardial infarction, myocardial fibrosis, rheumatic carditis, and caseous necrosis from tuberculosis.<sup>2</sup> Treatment for massive cardiac calcification includes endoatriectomy and replacement of the mitral valve.

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### References

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2. Gowda RM, Boxt LM. Calcifications of the heart. *Radiol Clin North Am.* 2004;42(3):603–617, vi–vii.