



IMAGES IN THORAX

Metastatic pulmonary calcification: 'crazy paving' pattern

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A 60-year-old man was admitted under the cardiology team for increasing shortness of breath over the past two months. His medical history of note included stable renal transplant 8 years ago, previous parathyroidectomy due to uncontrolled tertiary hyperparathyroidism and hypertension. His echocardiogram showed a critical aortic stenosis and was thus worked up for an aortic valve replacement.

His admission X-ray (figure 1) showed bilateral apical nodular alveolar opacities. High-resolution CT chest is as shown in figure 2 and was described



Figure 1 Chest X-ray depicting bilateral apical nodular alveolar opacities.

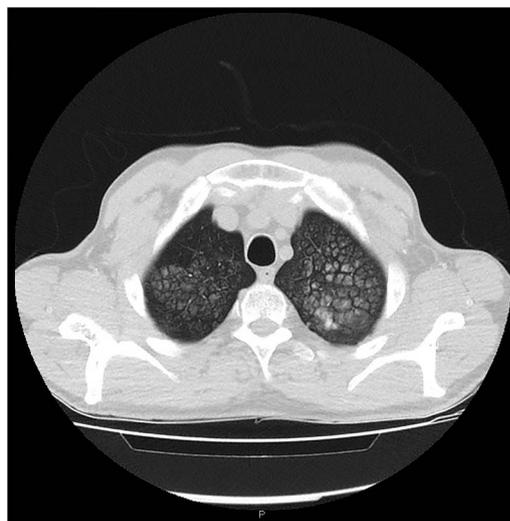


Figure 2 High-resolution CT chest showing calcification of both lung apices.

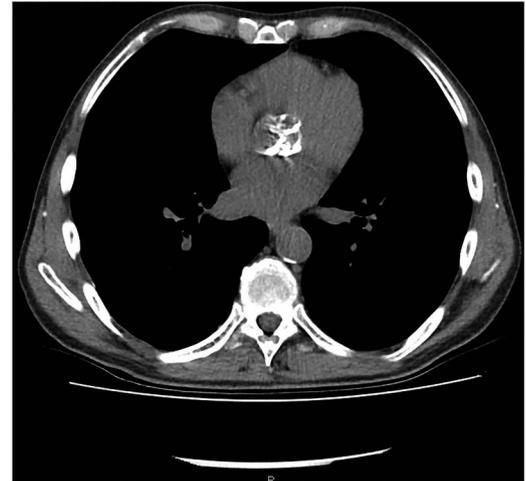


Figure 3 Same CT scan showing a heavily calcified aortic valve, most probably related to his previous hypercalcaemia.

superficially like a 'crazy paving' pattern by the reporting radiologist (figure 2). There is also severe calcification of the aortic valve noted (figure 3).

Metastatic pulmonary calcification is seldom recognised clinically as it is usually asymptomatic. High-resolution CT scan is sensitive and specific as it is able to depict small amounts of calcification seen compared with conventional chest X-ray.¹ Upper lobes are mainly involved (as in this patient) because of the high ventilation-perfusion ratio, which results in lower capillary pCO₂ and a higher pH compared with the lower lobes.² It is important to know that despite the term 'metastatic' being used, it is a relatively benign condition with a good long-term prognosis.

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Competing interests None declared.

Patient consent Obtained.

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REFERENCES

- 1 Rastogi S, Boyars M, Eltorkey M, *et al*. Metastatic pulmonary calcification in a patient with end-stage renal disease on hemodialysis: a common complication but a rare clinical diagnosis. *John Hopkins Adv Stud Med* 2006;6:82–5.
- 2 Bendayan D, Barziv Y, Kramer MR. Pulmonary calcifications: a review. *Respir Med* 2000;94:190–3.



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