


# Sclerosing thymoma with numerous coarse calcifications

Hironori Oyamatsu  | Takaki Fujimura | Takehiko Okagawa | Seijirou Niimi

Department of Thoracic Surgery, Okazaki City Hospital, Okazaki, Japan

## Correspondence

Hironori Oyamatsu, Department of Thoracic Surgery, Okazaki City Hospital, 3-1 Gosyoai, Koryuji-cho, Okazaki, Aichi 444-8553, Japan.  
Email: oyapyoco\_0110@yahoo.co.jp

Associate Editor: Jennifer Ann Wi

## Key message

This patient is the youngest among the previously reported sclerosing thymoma cases, and the resected mass contained numerous coarse calcifications due to dystrophic calcification. This is an unprecedented and extremely rare case.

## KEYWORDS

dystrophic calcification, hyaline fibrosis, sclerosing thymoma, thoracic tumours, thymectomy

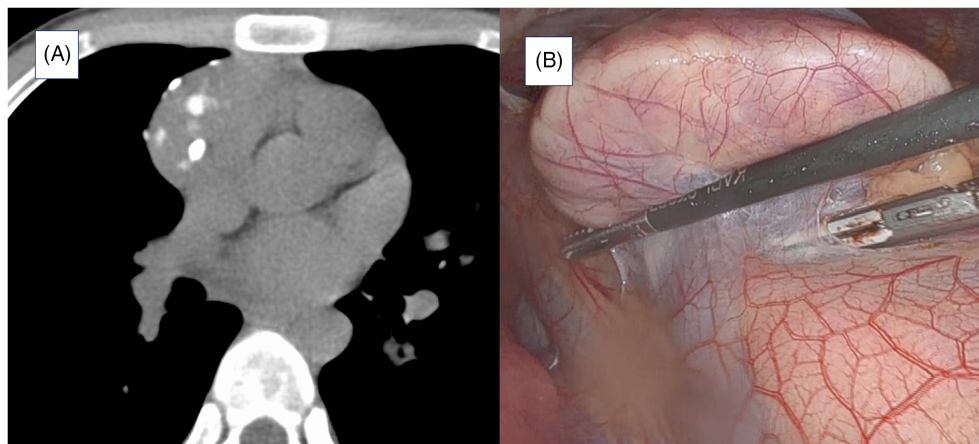
## CLINICAL IMAGE

A 16-year-old male presented with an anterior mediastinal tumour incidentally detected on CT before chondrolipoma surgery on his left knee. The tumour was 5.5 cm and contained numerous coarse calcifications. The mass was resected by thymectomy (Figure 1).

The tumour was a solid tumour with numerous coarse calcifications (Figure 2). Histological diagnosis was type B1 thymoma consisting of sparse collections of lymphocytes and a few of Hassall's bodies, while the stroma was occupied by fibrous tissue with hyalinization and ossification

(Figure 3). It was eventually diagnosed as sclerosing thymoma.

Sclerosing thymoma was removed from the 5th edition of the WHO tumour classification due to its lack of independence as a disease unit, but this rare type of thymoma was reported by Kuo.<sup>1</sup> Histologically, it is a thymoma with severe hyaline fibrosis, and this is caused by necrosis due to blood flow disturbance. This case contained numerous coarse calcifications unusual for thymomas whose pattern is usually stippled or nodular. This may be due to dystrophic calcification, in which the solubility of calcification decreases as a result of severely poor blood flow, which stops CO<sub>2</sub>



**FIGURE 1** (A) Computed tomography showing an anterior mediastinal tumour containing numerous coarse calcifications. (B) Operative finding showing the tumour has not invaded surrounding organs.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2024 The Authors. *Respirology Case Reports* published by John Wiley & Sons Australia, Ltd on behalf of The Asian Pacific Society of Respiriology.



**FIGURE 2** The tumour is a milky white solid tumour with numerous coarse calcifications.

production in necrotic tissue and increases alkalinity. Although there have been cases<sup>2</sup> which had calcifications, there has never been one as significant as this case.

#### AUTHOR CONTRIBUTIONS

Hironori Oyamatsu contributed to the writing of this manuscript. All authors treated the patient and approved the final manuscript.

#### CONFLICT OF INTEREST STATEMENT

None declared.

#### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

#### ETHICS STATEMENT

The authors declare that appropriate written informed consent was obtained for the publication of this manuscript and accompanying images.

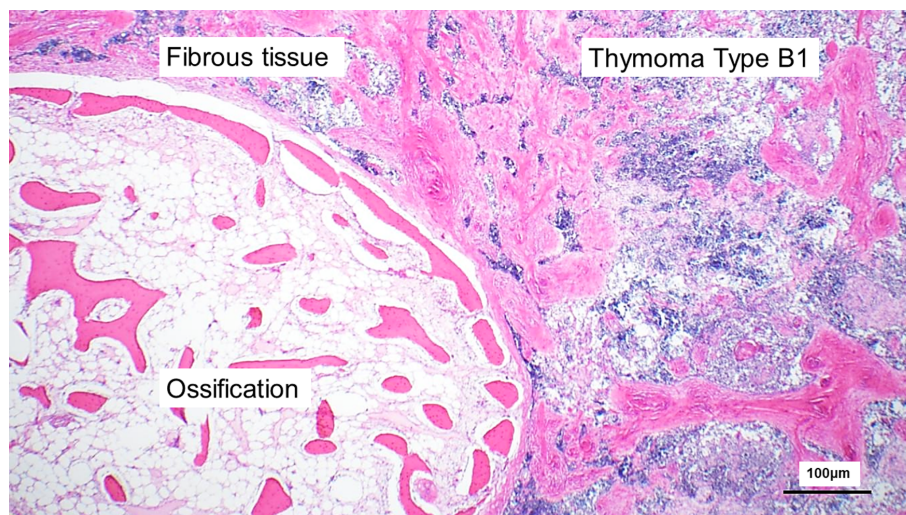
#### ORCID

Hironori Oyamatsu  <https://orcid.org/0000-0003-2449-4415>

#### REFERENCES

1. Kuo T. Sclerosing thymoma—a possible phenomenon of regression. *Histopathology*. 1994;25:289–91.
2. Gürel D, Kargı A, Yılmaz E, Şanlı A. Ancient (sclerosing) thymoma: case report. *Turk J Pathol*. 2010;26:245–8.

**How to cite this article:** Oyamatsu H, Fujimura T, Okagawa T, Niimi S. Sclerosing thymoma with numerous coarse calcifications. *Respirology Case Reports*. 2024;12(2):e01295. <https://doi.org/10.1002/rcr2.1295>



**FIGURE 3** Microscopic findings showing thymoma type B1, most of which area is occupied by hyaline fibrous tissue with ossification (HE staining,  $\times 20$ ).