

# AB023. Female patients developing B type thymoma after breast implantation: a report of 6 cases

Changlu Wang<sup>1</sup>, Lanting Gao<sup>1</sup>, Qin Zhang<sup>1</sup>, Lei Zhu<sup>2</sup>

<sup>1</sup>Department of Radiation Oncology, Shanghai Chest Hospital, Shanghai, China; <sup>2</sup>Department of Pathology, Shanghai Chest Hospital, Shanghai, China

*Correspondence to:* Changlu Wang, BS. Department of Radiation Oncology, Shanghai Chest Hospital, No. 241, West Huaihai Road, Shanghai 200030, China. Email: luise2w@msn.com.

**Background:** There were previous studies discussing the potential relationship between breast implantation and anaplastic large cell lymphoma. However, whether breast implantation may increase the risk of thymoma has not been reported yet. Here we reported 6 patients who developed thymoma several years after cosmetic breast implantation.

**Case Description:** From May 2012 to June 2020, 6 patients have been admitted in our hospital for the treatment of thymoma. All of them had a history of breast implantation. The medical records of 6 patients were reviewed and summarized. The median age of 6 patients was 49 (range, 42–57) years old. All implantation material was silicone bag. The median time interval between breast implantation and discovering of thymoma was 8 (range, 5–19) years. Five out of 6 (83%) patients were found with concurrent autoimmune disease (myasthenia gravis: n=4, dermatomyositis: n=1) at initial diagnosis. All patients received surgery-based treatment for thymoma, and pathological types were all B thymoma (B2: n=3, B2 + B3: n=2, B1: n=1). By the time of last follow-up, all patients are alive with a median survival time of 48 (range, 32–130) months.

**Conclusions:** Breast implantation may have potential relationship with the occurrence of thymoma featuring with a high possibility of autoimmune disease. Next generation

sequencing genetic analysis could possibly provide more information.

**Keywords:** Breast implantation; thymoma; autoimmune disease; case series

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## Footnote

*Conflicts of Interest:* All authors have completed the ICMJE uniform disclosure form (available at <https://med.amegroups.com/article/view/10.21037/med-23-ab023/coif>). The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee(s) and with the Helsinki Declaration (as revised in 2013). Written informed consent was obtained from all patients for the publication of this case series. A copy of written consent is available for review by the editorial office of this journal.

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