AB008. Results of systemic therapy and surgery for primary mediastinal seminoma

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Background: Primary mediastinal germ cell tumors are rare malignant diseases in the mediastinum. Mediastinal seminoma represents a good risk group of germ cell tumors. **Methods:** Clinical data of patients with mediastinal seminoma were retrospectively collected. According to different treatments, patients were divided into systemic therapy group and surgery group. Among surgery group, there were upfront surgery and surgery after neoadjuvant therapy. Baseline characteristics, tumor characteristics, treatment response and survival were analyzed.

Results: From 2008 to 2022, there were 62 patients with primary mediastinal seminoma. All patients were male. The average age was 28.7 years old, ranging from 12 years old to 65 years old. A total of 41 (66.1%) patients were treated through systemic therapy initially and 21 (33.9%) patients received upfront surgery. There were 18 patients receiving surgery after neoadjuvant therapy. The average initial tumor size was 100.6 mm in all patients and 72.5 mm in upfront surgery group. In all patients, 23 (37.1%) patients had stage I disease, 34 (56.8%) patients had stage II disease and 5 (8.1%) patients had stage III disease initially. There were 10 clinical stage I and 11 clinical stage II patients in upfront surgery group. All patients had normal initial serum alpha-fetoprotein (AFP) level and 54.8% patients had elevated initial serum human chorionic gonadotropin (hCG) level. In the neoadjuvant group, 83.3% patients had elevated initial hCG level and all patients had normal hCG level after neoadjuvant therapy. The objective response

rate was 88.9% in the neoadjuvant group. There were no residual tumors pathologically in the neoadjuvant group. The median follow-up time was 57 months, overall survival was 100% in all patients.

Conclusions: Patients with primary mediastinal seminoma were successfully treated with systemic therapy or surgery. **Keywords:** Mediastinum; seminoma; systemic therapy; surgery

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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-ab008/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. The study was conducted in accordance with the Declaration of Helsinki (as revised in 2013). The study was approved by the ethics board of Shanghai Chest Hospital (No. KS1970) and individual consent for this retrospective analysis was waived.

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