To investigate the ultrasonographic features of struma ovarii and malignant struma ovarii. Yingnan Wu, Litao Sun, et al. The Secondary Affiliated Hospital of Harbin Medical University, China.

Objective
To describe the ultrasound findings in women with struma ovarii and malignant struma ovarii.

Methods
The sonographic and histopathological features of 19 patients with histopathologically confirmed struma ovarii and 3 patients with malignant struma ovarii who were treated in The Second Affiliated Hospital of Harbin Medical University were retrospectively reviewed.

Results
On ultrasonography, 2 had unilocular cystic, 8 had multilocular cystic, 9 had multilocular–solid mass of the 19 struma ovarii patients. All the benign lesions had distinct margin. The wall of the multilocular–solid mass was irregular. Multiple short and grainy strong echoes can be seen on the wall. The solid component of the multilocular–solid mass is mostly manifested as slightly high echo like the echo of thyroid tissue, and the blood flow signal is abundant. The solid component is usually located on one side of the tumor, with "honeycombing" septations next to it. When accompanied by colloid components, it can be presented as a strong spot-like echo with "comet tail" sign behind.

Conclusion
Most of the struma ovarii is multilocular-cystic or cystic-solid mass, and the possibility of struma ovarii should be considered when the solid component is usually located on one side of the tumor with "honeycombing" septations next to it, or multiple short and granular strong echoes can be seen on the wall. The benign and malignant struma ovarii are not easy to distinguish.