



# Xiphoid Process Syndrome

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A 59-year-old woman presented with a 30-year history of epigastric cutaneous protuberance. A mass was visible in the mid-portion of the epigastrium, particularly when in the supine position (Figure A). Sagittal computed tomography revealed an elongated and curved xiphoid process (Figure B). The measured length, width, and thickness of the xiphoid process were 63.2 mm (reference range, 40-50 mm), 21.1 mm (reference range, 15-20 mm), and 4.9 mm (reference range, 3-5 mm), respectively. The angle from the sternal body to xiphoid process was 138° (reference range, 160°-180°).

Xiphoid process syndrome is considered an uncommon variation of xiphoid process with aseptic inflammation of surrounding tissues, which can be mistaken for epigastric masses. The xiphoid process can be broad, thin, monofid, bifid, trifid, curved, or deflected and contain foramina.<sup>1</sup> Especially prominent ventral deviation and a hook-like

ending of the xiphoid process should be considered in the differential diagnosis of the suspected epigastric masses.<sup>2</sup> Treatment options include block therapy, acupuncture, and surgical therapy when necessary.

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## REFERENCES

1. Mashriqi F, D'Antoni AV, Tubbs RS. Xiphoid process variations: a review with an extremely unusual case report. *Cureus*. 2017;9(8):e1613.
2. Akin K, Kosehan D, Topcu A, Koktener A. Anatomic evaluation of the xiphoid process with 64-row multidetector computed tomography. *Skeletal Radiol*. 2011;40(4):447-452.

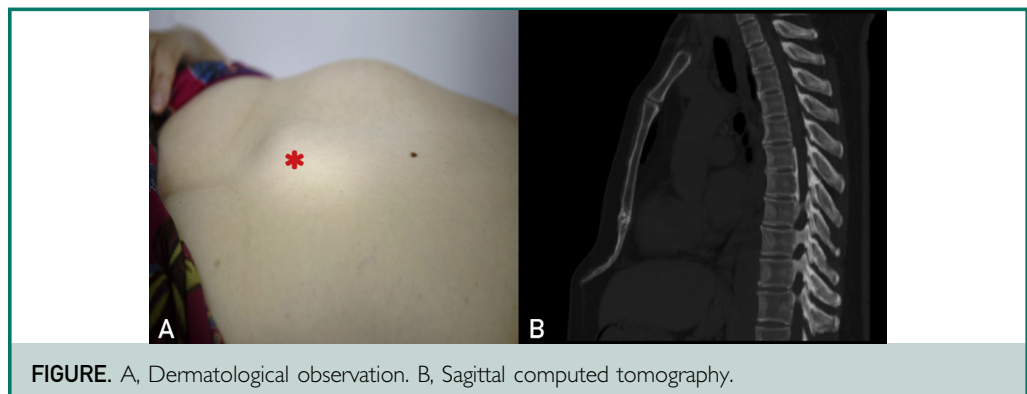


FIGURE. A, Dermatological observation. B, Sagittal computed tomography.