

CLINICAL IMAGE

Incidental intra-adrenal splenule

Wen-Hsuan Wendy Lin  | John P. Crapanzano | Bachir Alobeid

Department of Pathology and Cell Biology, Columbia University Irving Medical Center, New York, NY, USA

Correspondence

Wen-Hsuan Wendy Lin, Department of Pathology and Cell Biology, Columbia University Medical Center, 630 W. 168th street, VC14-236, 10032 New York, NY, USA.

Email: wl2190@cumc.columbia.edu

Abstract

Splenules can be found in the adrenals and should be considered in the differential diagnosis of adrenal incidentalomas.

KEYWORDS

accessory spleen, adrenal incidentaloma, adrenal mass, splenosis, splenule

Adrenal incidentalomas are asymptomatic adrenal masses discovered incidentally on imaging for unrelated reasons. Splenules, as developmental anomalies, have not been previously reported in the adrenal glands. Here, we report a case of an incidental

intra-adrenal splenule suggesting that splenules should be considered in the differential diagnosis of adrenal incidentalomas.

A 51-year-old man, status postsplenectomy 9 years prior to the current presentation for hereditary spherocytosis,

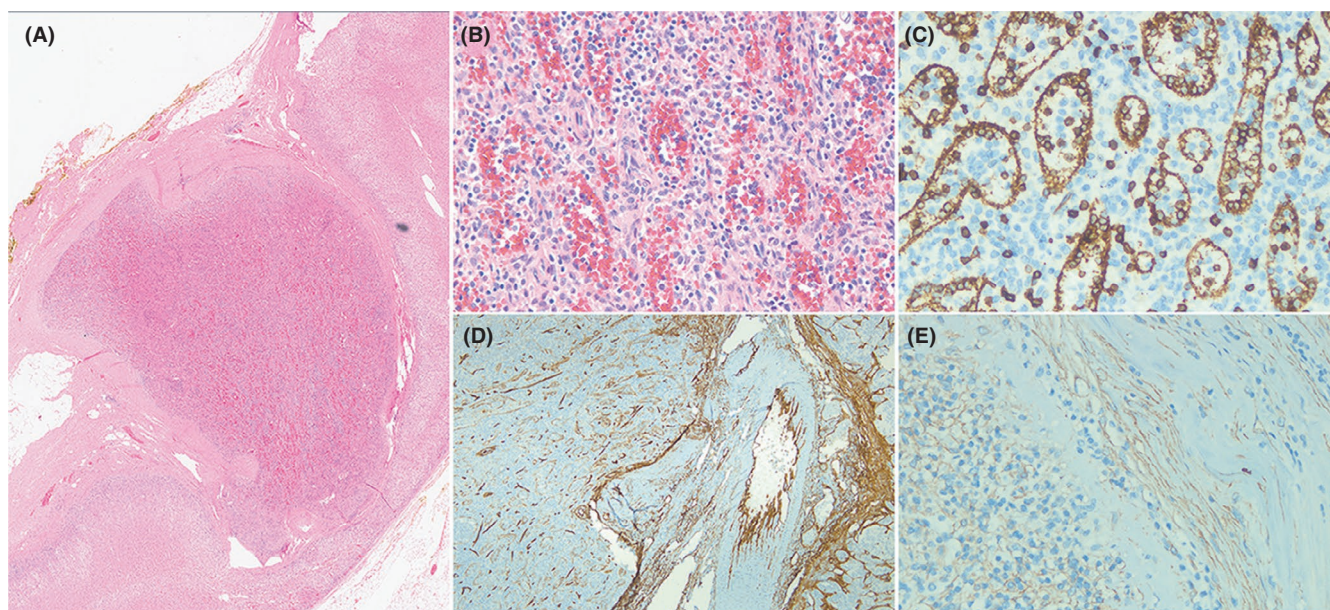


FIGURE 1 On H&E morphology, the nodule is well-circumscribed, surrounded by a capsule, and consisted of splenic red pulp with scattered megakaryocytes and erythroid precursors (panel A; whole slide image $\times 1.5$, panel B; $\times 20$ objective; H&E stain). CD8 highlights the sinusoids (panel C; $\times 20$ objective). CD34 highlights a large feeding vessel adjacent to the nodule (panel D; $\times 4$ objective). Smooth muscle bundles are seen in the capsule of the nodule on SMA (panel E; $\times 10$ objective)

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2021 The Authors. *Clinical Case Reports* published by John Wiley & Sons Ltd.

presented with new-onset hypertension and found to have hypokalemia and elevated aldosterone in the serum and left adrenal vein. On CT scan, a 7 mm nodule in the left adrenal gland with indeterminate enhancement characteristics was detected. Given the high clinical suspicion for primary aldosteronism secondary to adrenocortical adenoma, a retroperitoneoscopic adrenalectomy was performed and histology revealed an adrenocortical adenoma. In addition, in the grossly uninvolved adrenal tissue, a well-circumscribed, 6-mm-nodule was also found, which was surrounded by a fibrous capsule and comprised of splenic red pulp (Figure 1A–E). The findings were diagnostic of intra-adrenal splenule.

A splenule, or accessory spleen, is a developmental anomaly where splenic tissue is found outside the normal spleen. Splenules are different from splenosis, which is a consequence of embedding of broken splenic tissue in the peritoneal cavity. Unlike splenosis, splenules have thick capsules with smooth muscle elements and blood supply arising from arteries. Splenules are most commonly found in the splenic hilum (75%) and the tail of the pancreas (20%), and rarely in the wall of the stomach or intestine, ligaments, and omentum.¹ Adrenal incidentalomas are asymptomatic masses discovered incidentally on imaging studies performed for unrelated reasons.² Our case suggests that splenules should be considered in the differential diagnosis of adrenal incidentalomas.

ACKNOWLEDGEMENTS

Published with written consent of the patient.

CONFLICTS OF INTERESTS

None declared.

AUTHOR CONTRIBUTION

WWL and BA: involved in conception and design, and manuscript preparation; JPC: involved in conception and manuscript review.

ETHICAL APPROVAL

The authors confirmed that we have followed the high standards as set out by Commission on Publication Ethics (COPE) and International Committee of Medical Journal Editors (ICME). Ethics approval was not required for this study.

DATA AVAILABILITY STATEMENT

Data sharing not applicable—no new data generated.

ORCID

Wen-Hsuan Wendy Lin  <https://orcid.org/0000-0002-5414-7900>

REFERENCES

1. Bajwa SA, Kasi A. *Anatomy, abdomen and pelvis, accessory spleen*. StatPearls. Treasure Island, FL: StatPearls Publishing; 2020.
2. Terzolo M, Stigliano A, Chiodini I, et al. AME position statement on adrenal incidentaloma. *Eur J Endocrinol*. 2011;164(6):851-870.

How to cite this article: Lin W-HW, Crapanzano JP, Alobeid B. Incidental intra-adrenal splenule. *Clin Case Rep*. 2021;9:e04469. <https://doi.org/10.1002/ccr3.4469>