

Case	(213) Confusional state secondary to spontaneous bilateral adrenal hemorrhage in patient with primary antiphospholipid syndrome
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CASE PRESENTATION

A 70-year-old female with a prior history of deep venous thrombosis and stroke visited our Emergency Department because of nontraumatic back pain, abdominal pain, confusional state and fever.

Laboratory investigations were normal except low levels of sodium. Abdominal US revealed a right adrenal mass that it was not present in previous exams. CT scan showed bilateral high attenuation adrenal mass in non-enhanced CT, absence of contrast enhancement and stranding of the periadrenal fat. These findings were suggestive of acute bilateral hemorrhage.

MRI confirmed diagnosis because both masses were iso-hypointense on T1-weighted images and hypointense with a high intensity rim on T2-weighted images. Follow-up MRI confirmed hematoma resolution excluding an underlying mass.

DISCUSSION

Non traumatic and nontumoral adrenal hemorrhage is associated with hemorrhagic diathesis or coagulopathy.

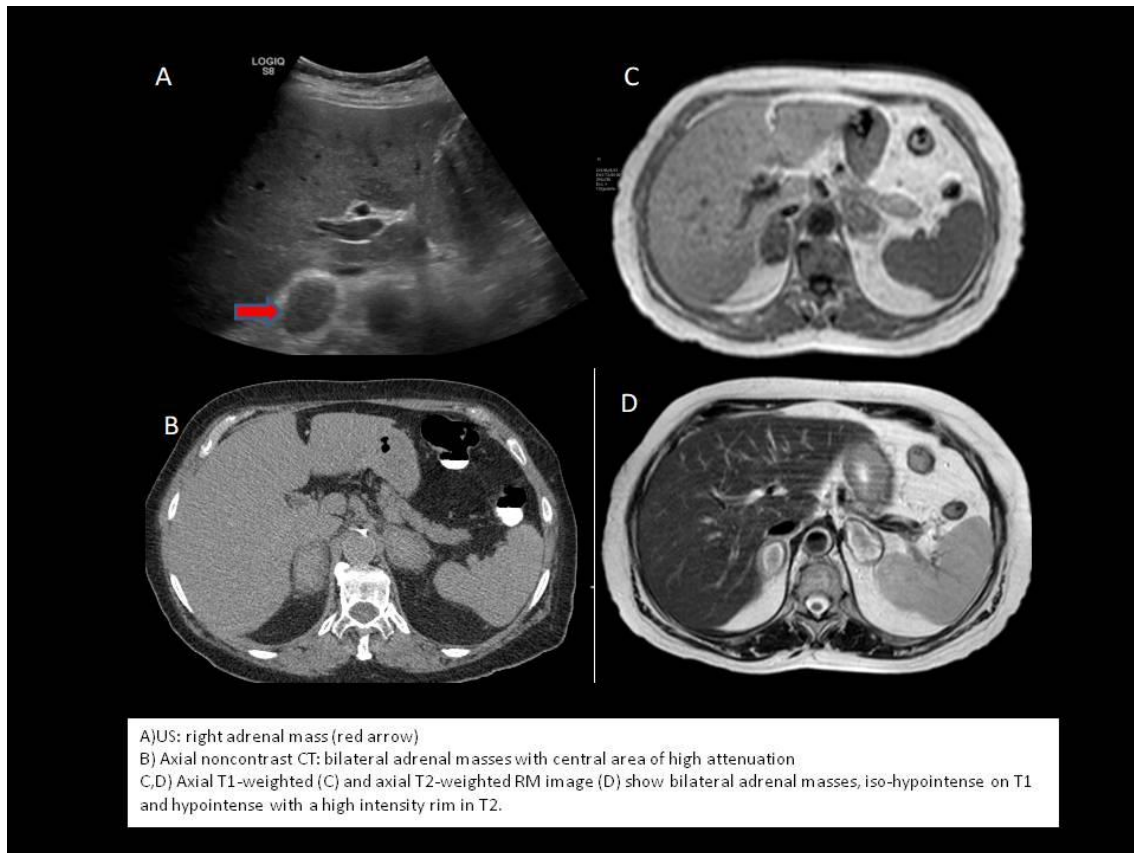
Laboratory tests were realized with positive lupus anticoagulant and cardiolipin antibodies, so our patient was diagnosed with antiphospholipid syndrome. An important destruction of adrenal gland is necessary to develop an adrenal insufficiency and many times a bilateral hemorrhage can produce that condition. Most patients present with non-specific signs and symptoms and the diagnosis is delayed. CT and MRI imaging findings are the clue to establish diagnosis of hemorrhage and adrenal insufficiency.

The radiological appearance depends on the age of the haematoma. Nontraumatic haematoma characteristically appears like a round or oval mass with high attenuation areas and stranding of periadrenal fat on CT. MRI is the most accurate imaging technique and it is used to determine the age of the haematoma and to rule out underlying mass.

The absence of a mass on recent CT or MR images would be an argument against tumor-related hematoma. Antiphospholipid syndrome should be suspected in those cases with a prior history of thrombosis and it must be confirmed with blood tests. Key Learning points: bilateral adrenal hemorrhage; adrenal insufficiency; antiphospholipid syndrome.

CONCLUSION

Bilateral adrenal hemorrhage may be the first clue to diagnosis of acute adrenal insufficiency. Imaging findings play an important role in diagnosis and management. Look for association with antiphospholipid syndrome, specially with a prior history of thrombosis.



BIBLIOGRAPHY

- Kawashima T, Sandler CM, Ernst RD, Takahashi N, Roubidoux MA, Goldman SM, et al. Imaging of nontraumatic hemorrhage of the adrenal gland. *Radiographics* 1999;19:949-63.
- Provenzale JM, Ortel TL, Nelson RC. Adrenal hemorrhage in patients with primary antiphospholipid syndrome: Imaging findings. *AJR* 1995; 165:361-364