Thrombus involving Ectopic Kidney and IVC Filter: An Interesting Anatomical Finding

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Background

- Inferior vena cava (IVC) filters are placed in venous thromboembolism when therapeutic anticoagulation is contraindicated.
- They can also be placed in chronic thromboembolic pulmonary hypertension and hemodynamically significant pulmonary embolism (PE).
- IVC filters have inherent thrombogenicity and thus require removal if no longer indicated.
- Here we present a case of a thrombus involving IVC filter and renal ectopia.

Case Presentation

- A 54-year-old man presented with lactic acidosis and altered sensorium.
- Six years prior, an IVC filter was placed after a provoked PE without resumption of anticoagulation for an unclear reason.
- Imaging now revealed an incidental renal ectopia partially compressing the common iliac veins resulting in a near occlusive thrombus extending up to the IVC filter.
- Given no evidence of venous congestion in lower extremities, no acute vascular intervention or filter retrieval was planned.
- His metabolic derangements and altered sensorium were from severe dehydration and resolved after aggressive intravenous resuscitation.
- Therapeutic anticoagulation to prevent further clot progression could not be initiated as he left against medical advice and did not follow up.

Discussion

- The inherent thrombogenicity of the IVC filter, along with venous stasis induced by the filter and the compressive ectopic kidney, predisposed to the thrombus formation.
- Given the anatomic variance and history of PE, filter retrieval in our patient may need to be indefinitely deferred.

Renal ectopia partially compressing the common iliac veins resulting in a near occlusive thrombus extending up to the IVC filter.