[ID-P#009] Rodenticide poisoning presenting as ruptured corpus luteal cyst in a middle- aged lady

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Background: This is a rare case of a patient presenting to our Emergency Department with bleeding diathesis which was found to be due to Bromadiolone poisoning.

Case Presentation: 49yo female with no past medical history presented to the ED with a four-day history of abdominal pain, vomiting, diarrhea, and hematuria. Initial examination revealed pallor and right iliac fossa tenderness. Investigations: Hemoglobin 6.6 g/dL, PT >180 sec, INR >10, and APTT 88 sec. A Computed Tomography of the Abdomen and Pelvis (CTAP) scan revealed large-volume hemoperitoneum from a ruptured right corpus luteal cyst. Patient was transferred to a tertiary hospital with hematology and gynecology support. Further history-taking revealed that two other household members had presented to another hospital with bleeding diathesis. This prompted concern of a toxicological cause connecting the 3 cases and urgent toxicology screening confirmed bromadiolone poisoning in all three.

Management and Outcome: Patient was initially given 10mg Intravenous (IV) Vitamin K, Fresh Frozen Plasma, Cryoprecipitate and blood transfusion. She underwent diagnostic laparoscopy, right cystectomy, and peritoneal washout. Post diagnosis of bromadiolone poisoning, IV Vitamin K 10mg more was given and titrated every 6H to an INR target of 1.4. She was discharged 10 days later on a tapering dose of oral Vitamin K.

Discussion: Superwarfarin poisoning diagnosis can be challenging without a clear history(1). Bromadiolone is one of the Superwarfarins used as a rodenticide. Mechanism of action is that of a Vitamin K epoxide reductase inhibitor. This depresses hepatic activation of the Vitamin K-dependent coagulation factors, causing severe coagulopathy(2,3,4). Treatment involves Vitamin K and correcting coagulopathy(1,5).

Conclusion: Superwarfarin poisoning should be considered in patients presenting with bleeding diathesis. Prompt diagnosis and treatment is essential for optimal patient outcome. As Superwarfarins have a long half-life, long term Vitamin K treatment is essential and may be required for many months.