

中文題目：罕見的低鉀血症-靜脈硬化性大腸炎

英文題目：A rare etiology of hypokalemia - phlebosclerotic colitis

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## Introduction:

Phlebosclerotic colitis is a rare form of nonthrombotic colonic ischemia. It can present with a variety of gastrointestinal symptoms including abdominal pain, nausea, vomiting, diarrhea, hematochezia, and bowel obstruction[1]. We reported a case presented with hypokalemia and finally diagnosed as phlebosclerotic colitis.

## Case Presentation:

A 78-year-old man with Parkinson's disease used Chinese herbal medicine for many years for health promotion. End stage kidney disease (ESKD) was diagnosed and he received regular hemodialysis since June 2022. However, persistent hypokalemia was found under regular hemodialysis. He complained of vomiting, abdominal distention, diarrhea, and low grade fever and visited the emergency department in July 2022. Physical examination revealed only diffuse abdominal tenderness without peritoneal sign. Laboratory examination showed potassium level of 1.8 mmol/L, peripheral white blood cell count of 20630/uL, and C-reactive protein level of 120.53 mg/L. Plain abdominal radiography revealed tread-like calcifications (Figure 1). Abdominal CT scan reported wall thickening and peripheral infiltration of the ascending and transverse colon with mesocolon vascular calcifications which were main presentations of phlebosclerotic colitis (Figure 2). Based on the above findings, phlebosclerotic colitis was diagnosed.

The treatment was conservative, consisting of fasting, fluid replacement, parenteral nutrition, and antibiotics of ceftazidime and vancomycin for possible hospital acquired infections. The infection was under control soon and the abdominal radiography 5 days later revealed decreased bowel gas but calcified colon vessels. However, persisted diarrhea as well as refractory hypokalemia despite intravenous potassium supplement until we adjusted potassium concentration of the dialysate to 4 mmol/L. The patient improved a lot and was discharged with mild diarrhea.

## Discussion:

Phlebosclerotic colitis is a rare venous ischemic colitis almost exclusively seen in individuals of East Asian ancestry[1]. The etiology is unknown while some studies reported a close association with long term consumption of Chinese herbal medicine, especially the one containing geniposide [1].

Patients with phlebosclerotic colitis usually presented with insidious onset non-specific symptoms[2]. Phlebosclerotic colitis is pathologically characterized by thickening of the colonic wall, fibro

us degeneration of the submucosal layer with calcification[3]. Unfortunately, there are no treatment guidelines or available therapeutic agents for phlebosclerotic colitis.

## Conclusions

Physicians should be cautious of phlebosclerotic colitis in patients with persistent hypokalemia and diarrhea.

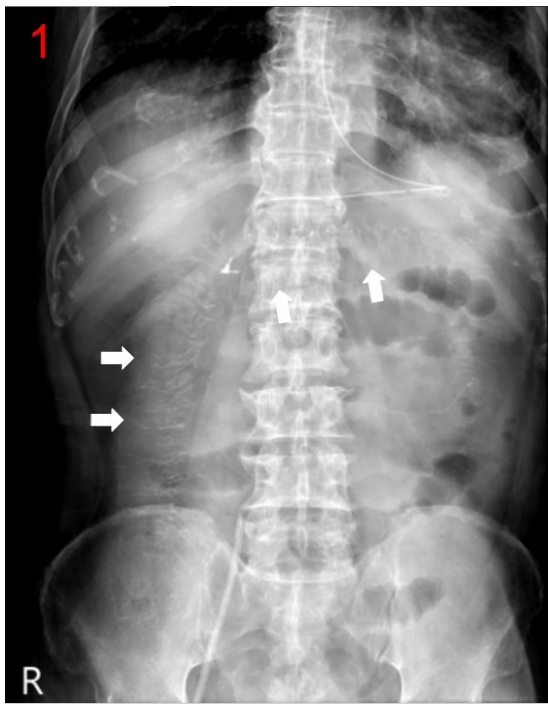


Figure 1: plain abdomen radiography showed treadlike calcifications.(white arrow)

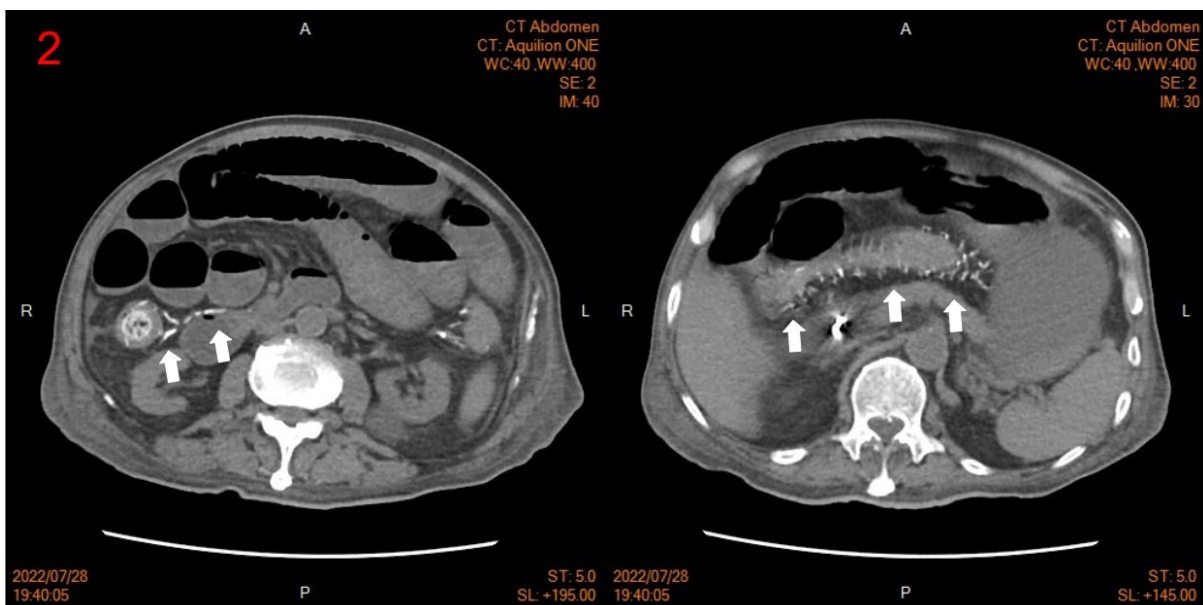


Figure 2: Abdominal CT revealed typical finding of threadlike calcification of colonic veins over a scending and transverse colons.(white arrows)

#### References

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