

McKittrick-Wheelock syndrome - a rare but important complication of giant rectal villous adenoma

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Introduction

Colorectal villous adenomas are common. A rare but important complication of rectal villous adenoma is the electrolyte and water “depletion syndrome” which can be elusive as a diagnosis. If recognised and managed expediently, severe metabolic and renal sequelae can be prevented through appropriate replacement therapy and timely surgery.

Case Description

- 78 year old female
- Presenting complaint;
 - Collapse at home
 - Drowsy
 - Fulminant watery diarrhoea
- O/E
 - Clinically dehydrated and mildly obtunded
 - Hypotensive (90/48mmHg)
 - Tachycardic (118 BPM)
- Background
 - 2-year history of progressive chronic watery diarrhea.
 - Multiple hospital and GP attendances.
 - Tentative Dx of '*autonomic neuropathy*'.

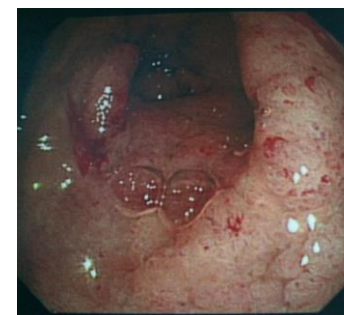


- Investigations
 - ABG – **Metabolic Acidosis**
 - Bloods – **marked electrolyte disturbance with renal impairment**
 - Stool – culture –ve

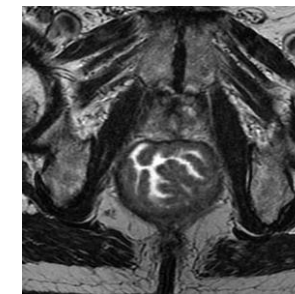
Blood Test	Result	Normal range
Sodium	124	136-144 mmol/L
Potassium	3.1	3.5-5.0 mmol/L
Urea	23.8	3.0-9.2 mmol/L
Creatinine	319	45-84 µmol/L
Glucose	9.6	3.6-8.0 mmol/L
Hb	152	115-160 g/L
WBC	14.4	4.0-11 x10 ⁹ /L
PCV	0.49	0.36-0.48

Managed initially with IVF therapy and electrolyte replacement

- Patient Notes - no record of a rectal examination throughout 2 year timeline of symptoms.
- DRE - extensive soft polypoid mass palpable arising in the rectum.
- Endoscopic findings
 - Large rectal polyp
 - 15 cm
 - Extending from dentate line to apex of rectum
 - Large amount of mucus



- Biopsy Result
 - **villous adenoma** with low-grade dysplasia
- Imaging (MRI - Axial and Sagittal views)



- Large fleshy mass **confined to rectum, no extension** beyond rectal wall
- Management
 - Failure of Transanal Endoscopic microsurgery (TEMs) to control symptoms.
 - Discussed at **Colorectal MDT** and proceeded to an Abdominoperineal resection with fashioning of an end colostomy.

Discussion

Villous adenomata have a propensity for secreting large volumes of mucus rich in potassium and sodium and the losses can be so great as to result in cardiovascular, neurological and renal sequelae. Where rare, this case highlights the values in carrying out a thorough clinical assessment.