WHEN COMMON SYMPTOMS LEAD TO AN UNCOMMON DIAGNOSIS

Jason Bau, PGY2 Internal Medicine
Debra Pugh, MD MHPE FRCPC
The Ottawa Hospital
CASE

• 71y female, presenting to ED with a fall
• Past medical history: hypothyroidism (levothyroxine), hypertension (amlodipine), depression (venlafaxine)
• Patient notes severe weakness, leading to fall, and unable to rise independently
• Incidentally, husband reported worsening cognitive decline over the past 8 months
  • Short term memory loss ➤ IADLs ➤ ADLs
  • Auditory and visual hallucinations
  • Family physician in process of investigating with no cause identified
- Frail and cachectic
- Vitals: T 36°C BP 98/54 HR 90 RR 18 O2 98% RA
- CVS and respiratory: unremarkable
- Abdo, MSK, skin: unremarkable
- Neuro:
  - disoriented to time and place, no CN deficits
  - Strength: 2/5 to 3/5 in all muscle groups, equal bilaterally
  - Sensation grossly normal to touch. Unable to assess gait as patient too weak to stand. No appreciable spasticity or rigidity. No tremors.
  - Cerebellar testing normal. No pronator drift.
INVESTIGATIONS

- CBC: **WBC 15.3**, Hbg 125, Plt 254
- Electrolytes: Na 136, **K 1.2**, Cl 104, CO₂ 22, Ca 2.11, **PO₄ 0.32**, Mg 0.97, Alb 27, Cr 126,
- **CRP 26.8**, ESR 23
- Glucose 8.8, **CK 1455**, Tnl 582
- Blood & urine cultures negative
- Chest XR: normal
- CT head: normal
- ECG: as shown in next slide
\[ K^+ = 1.2 \text{mEq} \]
\[ + 400 \text{mEq} \quad K^+ \]
\[ \underline{\text{Total: }} 4.2 \text{mEq} \]
\[ K^+ \approx 4.5 \text{mEq} \]
\[ K^+ = 2.5 \text{mEq} \]
THE KIDNEY IS CALLING.

- pH (venous): "normal"
- $HCO_2 = 14 - 20$  Anion gap: normal
- TTKG: 16 (distal loss)
- Urine electrolytes: $K_{urine} = 23$
- Urine charge: $+17$
“You pee off bicarbonate when you have RTA instead of holding onto it like it’s your last protein bar on a Bro’d trip.”
TYPE 1 RENAL TUBULAR ACIDOSIS

- Dysfunction of distal nephron resulting in potassium wasting and non-anion gap metabolic acidosis
- Causes include:
  - Autoimmune: Sjogren’s syndrome, lupus
  - Drugs (NSAIDS)
  - Genetic
SJOGREN’S SYNDROME

• ANA 1:320
• Anti-Ro52: 1534
• Anti-Ro60 (SSA): >1375
• Anti-La (SSB): 141

• Schirmer’s test: zero tear production
• “Very thirsty all the time”
INVESTIGATIONS

CT head: normal
MRI brain: non specific changes (?
vаскулит)
EEG: normal, no epileptiform activity
Lumbar puncture:
  Infection: negative
  Creutzfeldt-Jacob: negative
  Paraneoplastic antibodies: negative
  Oligoclonal banding in CSF

MOCA 9/30
WHAT ABOUT THE BRAIN?

• Sjogren’s in rare instances has been found to affect neurological function
  • Neuropathy and frank dementia
  • Associated with oligoclonal bands in CSF

• Prednisone 40mg po daily (taper)
  • Resolution of hypokalemia, RTA and visual and auditory hallucinations
  • Patient had no recollection of hospitalization (“lifting of a fog”)
• Discharged home after 3 week hospitalization
TWO MONTHS AFTER STEROIDS

Mar 2018

May 2018
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A HAPPY ENDING

- MOCA: **26/30 (9/30 in hospital)** with resolution of hallucinations
- Weight gain: 57kg to 65.2kg
- RTA and hypokalemia resolved
- ESR/CRP normalized
- Patient resumed ADLs, and IADLs (including bookkeeping!)

**Multi-system Sjogren’s**
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