# 5/6/20 Morning Report with @CPSolvers

***Case Presenter**: Max Coll (@MDColl90)* ***Case Discussants**: Margaret Lie (@MargaretL16) & David Deng (@ddeng_22)*

**CC**: weakness and recurrent syncope

**HPI**: 76F h/o CAD p/w prog weakness and recurrent syncope while sitting in wheelchair, felt lightheaded, slouched head back and became unresponsive. Responded to cold water to her face.
ROS: no confusion on awakening but some nausea, no bowel/bladder incontinence

Preceding month:
Well without wheelchair >1 mo ago
Dyspnea → NSTEMI with PCI to LAD & Started on metop, imdur, statin
IST 4 days later (had stopped ASA), angioplasty
5 days later → palpitations + syncope with NSVT, newly reduced EF 45% and apical akinesis, increased metop, started on lisinopril and plavix
Discharged from SNF in a wheelchair

**PMH**:
CAD, HTN, HLD, NSTEMI

**Meds**:
ASA
Atorva
Imdur
Metop tart 25 BID
Mirtazapine
Ticagrelor

**Fam Hx**:
Breast CA

**Soc Hx**: From Haiti

**Health-Related Behaviors**:
Prior tobacco use
No EtOH

**Allergies**: none

**Vitals**: **T**: 98.1 **HR**: 78 **BP**: 97/61 **RR**: 18 **$SpO_2$**: 100% RA
**Exam**:
**CV**: nl heart sounds no mrg, no JVD, no LE edema
**Pulm**: CTAB
**Abd:** WNL
**Neuro**: unable to lift arms above head, LE not antigravity, DTRs unable to elicit
**Extremities/Skin**: WNL

**Notable Labs & Imaging**:
**Hematology**:
WBC: 6.3 Hgb: 10.2 Plt: 341

**Chemistry**:
Na: 137 K: 4.1 Cl: 101 CO2: 22 BUN: 15 Cr: 0.55
glucose 90

AST: 574 ALT: 387 Alk-P: 104 T. Bili: 0.6 Albumin: 2.9
Phos 3.7 TSH 3.8

ESR 34 CRP 19.1 CK 10865
Trop 1961
HIV/RPR/lyme/ANA → Neg

ECG: NSR
CXR: LLL atelectasis
CT: w/atelectasis, 12 mm irreg RLL nodule
Muscle bx: necrosis of skeletal muscle
Anti-Jo, Anti-SRP: both neg
**Anti-HMG CoA Reductase positive**

**Problem Representation**: Older woman with extensive cardiac history and recent intensification of medical management p/w proximal weakness and syncope, found to have e/o myopathy with rhabdomyolysis, muscle necrosis on bx, and anti-HMG CoA Reductase Ab dx with autoimmune necrotizing myositis 2/2 statin medication

**Teaching Points (Moses)**:

**Syncope:** Physiology: decreased CO vs. decreased resistance.
- Vasovagal syncope → can have myotonic jerks & urinary incontinence.
- Remember mimics (exp: seizure, stroke, hypoglycemia)

**Myopathy:** DDx includes drugs, metabolic/endocrine, inflammatory, neoplasm-related etc. Absence of DTR suggests LMN involvement. Can see reduced DTR in myopathies.

**Clues to help work up a myositis:**
- Chronicity: rapidly progressive, think autoimmune necrotizing. Polymyositis/inclusion body tend to be more chronic
- Level of muscle destruction: severe rhabdo (e.g. CK > 10,000 in this case) suggested autoimmune necrotizing, although bad rhabdo can occur with chronic polymyositis
- Physical exam: often symmetrical and proximal in poly/autoimmune vs. tends to be distal & not symmetrical in inclusion body myositis
- Statin-induced: can be 2/2 dose increase or decreased metabolism (exp: CYP inhibitor). Stopping drug often doesn't stop damage → immunosuppression

**Rhabdo:** can mask antecedent hypokalemia

**AST/ALT elevation:** both found in muscle ~ 4:1 ratio. AST half-life is quicker, and the ratio can approach 1:1 in a myopathic process, so a CK can be informative!