10/30/20 Morning Report with @CPSolvers

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CC: Finger numbness and pain

HPI: 58M Bilateral fingers numbness and pain, gets worse at night, right > left. No fever, headache, SOB.

PMH:
HTN
Hep C
CKD
Congenital solitary kidney
DM w/ nephropathy peripheral and neuropathy feet

Meds:
Metformin
Insulin
Nifedipine
Aspirin
Atorvastatin

Fam Hx:

Soc Hx:
Night security guard
30 pack/y
Alcohol 1-2 / month
Past IV drug use

Health-Related Behaviors:

Allergies:

Vitals: **T**: Afebrile **HR**: 86 **BP**: 123/76 **SpO_2**: 99% room air
Exam:
Gen: Well appearance
Neuro: Orientated. Strength 5/5, hand pain 4+/5 and right foot dorsiflexion 4/5. Babinski bilateral?. Gait normal, no upper lower cerebellar symptoms. Decreased monofilament sensation feet
Extremities/Skin: Mild pedal edema

Notable Labs & Imaging:
Hematology: WBC, Hgb, Plt: nl
Chemistry:
Cr:3.4 (2.6 baseline 3mo) Protein/creatinine ratio: 5.6
UA: 3+ protein no RC no white cells.
US: normal bladder, hepatic steatosis.
ALT 65 TP 6.2 Alb 2.5 HbA1c: 7.2
AST Billi AlkP GGT B12 RPR TSH HIV: normal
Nerve conduction test: No link axonal loss proximal medial nerve bilateral (mononeuritis multiplex). Mild weakness dorsiflexion
ANA ANCA CCP Cryoglobulins negative
ESR, CRP high
SPEP: Polyclonal gammopathy
RF, Hb Surface Ab + (Surface antigen and core negative)
Hep C viral load >5000, C3 89, C4 9
Ultrasound: Bilateral median nerves enlargement both wrist
Nerve biopsy: Fibrinoid necrosis small vessel surrounding w/ inflammation consisted w/ vasculitis.
Second Cryoglobulins positive
Final Dx: Vasculitic nephropathy secondary cryoglobulins
Tx: High dose steroids, Rituximab, Hep C antiviral tx -> Renal fx did not recover -> HD

Problem Representation: 58M w/ PHx of uncontrolled DM and Hep C presents with bilateral finger numbness and pain. Exams showed a nephrotic range proteinuria, positive cryoglobulins and mononeuritis multiplex. Final Dx: Vasculitic nephropathy 2ry to cryoglobulins

Teaching Points (Sukriti):
Neurological syndrome = Localisation x time
A. Investigating the Sx: Numbness of thumb, index and middle finger = Bilateral CTS
Bilateral involvement -- UMN pathology - Man-in-the-barrel syndrome (b/l ACA lesions
Distribution -- LMN pathology peripheral nerve - Amyloidosis (AL, TTR)
Problem representation: Sx + time + context
Diabetes + neurological syndrome = neuropathy, stroke, hyperglycemia; Vasculitic syndrome (diabetic cranial N infarction , myotrophy brachial/LS plexus, myonecrosis)
B. Collecting Clues: Neuropathy -- focal vs polyneuropathy vs mononeuritis complex
Working hypothesis:
Diabetic neuropathy + CTS > Mononeuritis complex
CTS: Amyloidosis -- age favors TTR - wild > genetic
Mononeuritis complex: Vasculitis -- Diabetic vasculitic syndrome, Cryoglobulinemia, paraneoplastic, connective tissue disease (small vessel) > lyme disease, leprosy
C. Formulating a hypothesis: Nephrotic syndrome + mononeuritis multiplex
Non inflammatory glomerulopathy. + inflammatory nerve disease
Amyloidosis TTR rarely affects kidney
Clinical pearl: Although frequently causes nephrotic range proteinuria, rarely causes nephrotic syndrome
D. Testing the hypothesis:
Hep B serology -- surface Ab + core -ve -- Hep B vaccination
hypocomplementemia -- Cryo (RF+) > Lupus (ANA -ve), post infectious