1/10/22 Morning Report with @CPSolvers

***Case Presenter**: Franco Murillo (@FrancoMurilloCh) **Case Discussants**: Sam Brondfield(@s_brond) and Laura Huppert(@laura_huppert)*

CC: Tiredness and weight loss for 1 month

HPI: 78 yo Female fully functional until 1 mo ago when she started to progressively feel tired, sleep more and lose weight approx 5 kg.
2 days prior her visit to the ED she said she could not walk due to extreme weakness
On admission day she could not stand up and looked confused
No fever or SOB. No previous cancer screening

PMH: Stroke
2 y HTA
Qx for cataracts 13y prior.
Goiter

Meds:
Losartan, aspirin, statin

Fam Hx:
DM in father.

Soc Hx: Lived in a rural part of peruvian Andes up to her 20s

Health-Related Behaviors:
No smoking but used to cook with wood.
Used to drink regularly until her 50s

Allergies:
None

Vitals: **T**: **37** **HR**: 85 **BP**: 120/60 **RR**: 20 **SpO_2**: 98% room air BMI: 19 (prior 24)
Exam:
Gen: Looks ill and sleepy
HEENT: Thyroid looks increased in size diffusely, no tender, no lymphadenopathies.
CV: normal
Pulm: dullness and diminished lung sounds in the left lower third of the lung
Abd: nondistended, no masses or tenderness
Neuro: confused and sleepy, no FND, normal reflexes no meningeal signs
Extremities/Skin: No edema, rash, sweaty

Notable Labs & Imaging:
Hematology:
WBC: 11 280 (normal differential) Hgb: 10 MCV 88 HCM 29 Plt: 198

Chemistry:
Glu: 31 after dextrose 60 (w improvement of symptoms)
Na: 139 K: 4 Cl: Ca: 7 Albumin: 2.1 TP: 4.63
CO2: BUN:16 Cr:.3 CPK: 9 AST: 20 ALT: 29
LH 25 FSH 40 PTH 52 Prolactin: 22.5 T4 1.82 (normal) TSH: .3
6am cortisol: 18

Insulin 1.4 (low) C-peptide: 0.1 (low)
IGF-1: 46 IGF2: 145 IGF-2/IGF-1: 3.17 (High)

Imaging:

Thorax CT: Pleural dependent mass of 16x10x11 cm w/ interior necrosis
Biopsy: Mesenchymal neoplasia with fusiform cells BCL 2 + CD34 + consistent with solitary fibrous tumor of the pleura.

Final diagnosis: Paraneoplastic persistent hypoglycemia due to solitary fibrous tumor of the pleura (Doege potter syndrome)

Problem Representation: 78 years old female comes to the ED because of weakness and weight loss for 1 month. Physical exam remarkable for thyromegaly, pleural effusion and labs showed hypoglycemia with a high IGF-2/IGF-1 ratio in the context of pleura dependent mass on imaging.

Teaching Points (Brodie):

- **Weight loss:** Systemic approach with localizing symptoms/signs (exam/lab)-significant weight loss-any amount of unintentional loss with other symptoms is sinister.
- **Goiter:** etymologically large thyroid, a diffuse enlargement is relatively benign.
- **AMS: MIST** in the context of malignancy (metabolic primary/secondary), mets, paraneoplastic.
- **Causes of hypoglycemia:** infection, dietary restriction, malignancies, paraneoplastic (*IGF-2* mediated severe hypoglycemia-solid tumors), endocrinopathies including adrenal insufficiency.
- Interpret Insulin along with blood glucose
- **Low glucose, low insulin, low ketone, high IGF-2/IGF-1 >10** is expected of an IGF-2 producing tumor.
- Discuss the issue about the tissue with the pathologist especially during rare diagnoses.