Supplemental Digital Appendix 1

Example of a case and instructions used, from a study of reflection on initial diagnoses and final diagnostic accuracy, Bern, Switzerland, 2019

Case 1
Please read the case below and provide the most likely diagnosis for the case. Work as quickly as possible but without jeopardizing accuracy.

A 71-year-old man presents with complaints of swollen legs and feet, and weight loss.
He felt well until 2 months ago, when he noticed oedema in the lower limbs and progressive weight loss. He lost 15 kg in 2 months' time. He reports shortness of breath when climbing the stairs but does not experience difficulties during normal activities. There is no history of orthopnoea, paroxysmal nocturnal dyspnea or chest pain. He has not used medications and has no digestive complaints. He reports nocturia (4 to 5 times per night) without other urinary symptoms.

The patient smoked 2 packs of cigarettes and used to have substantial alcohol consumption until 2 years ago, when he entirely quit smoking and drinking alcohol. Two years ago he was diagnosed with prostate cancer and treated with orchiectomy. Presently there are no signs of active disease, with PSA within normal range. There is not history of hypertension and the family history shows no relevant findings.

Physical examination:
BP: 190/92 mmHg; pulse: 84/min regular; temp.: 36.5° C.
Jugular veins: normal. No presence of jaundice. Heart: normal cardiac rhythm, cardiac frequency: 84. Lungs: sparse expiratory wheezes in both lungs. Abdomen: no abnormalities. Prostate: hard with irregular surface. Extremities: large pitting oedema (4+/6) in both lower limbs.

Lab tests (normal range in brackets)**:**
Hb 9,2 mmol/L (8,6-10,5); Ht 50% (0,40-0,50); white cell count 11,9 x 10^9 /L (3,5-10,0) with 83% segmented, 5% rods, 5% lymphocytes and 7% monocytes; Urea: 8.2 mmol /L (2,5-7,5); Creatinine 106 µ mol/L (65-115); Albumin 32 g/L (35-50); Ca 2.32 mmol /L (2,2-2,65); Bilirubin, alkaline phosphatase and transaminases: normal; LDH 487 U/L (<450); PT 10 sec. (28-39); Sodium 150 mEq/L (135-145); Potassium 2,1 mEq/L (3,5-5,0); Chloride 93 mEq/L (97-107).
pH 7.62 (7,35-7,45), pCO_2 6.1 kPa (4,0-6,4), pO_2 7.6 kPa (10,0-13,3), HCO_3 47 mEq/L (21,0-27,0)
Cortisol 1269/1545 nmol /L (138-635 / 83 – 414); ACTH 110 / 230 pmol/L (< 26.4/ <18.7).
Urine analysis: no abnormalities.

EKG: left axis deviation

Imaging tests:
Chest X-ray: interstitial infiltrate in both sides

What is the most likely diagnosis for this case?

Case 1

Case 1 is presented again below:

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Imaging tests: Chest X-ray: interstitial infiltrate in both sides

Write down the clinical findings in the case that speak in favour of your initial diagnosis:

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Now write down the findings that speak against your initial diagnosis:

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Now that you have gone through the case again, provide your decision below.
What is the most likely diagnosis for this case?

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