CASE 2

CASE STEM:

55yo M presents with nausea, vomiting and myalgias that started 3 days ago. He reports feeling fever and chills at home but didn't take his temperature. He returned 4 days ago from a business trip to Ecuador. Please manage this patient

HISTORY:

PMHx: HTN, DM2, hypercholesterolemia. immunizations UTD
Meds: Metformin, Ramipril, Lipitor
Allergies: Sulfa drugs (anaphylaxis)
SHx: 30yr smoker, Some EtOH (7-10d/week), Denies drugs

HPI: Felt fine the first day he flew home and the developed myalgias, chills, nausea, vomiting (no blood, 3-4x/d, not tolerating PO). Feels flushed as well, mild headache. No diarrhea. No abdominal pain. Remainder of review of systems is unremarkable.

Travel history: Was in Ecuador for a week on business, mostly in the city staying in hotel rooms. Did a few site visits into the country with clients but always during the day. Ate only cooked food and bottled water, was on Malarone the entire time for chemoprophylaxis. Mosquitos were bad but the hotel had aircon. No other bites. No injuries, no medical interventions. Denies sexual contacts.
Pre-travel: did not see a travel specialist prior to departure. Has had Twinrix vaccination previously.

PHYSICAL EXAM:

HR: 115, BP 145/90, RR 18, Temp 39.5, SpO2 99% RA
General Appearance: facial flushing, looks a bit dehydrated
CNS: PERL, no focal deficits, oriented x3
HEENT: Normal conjunctiva, mucous membranes dry, neck supple, no lymphadenopathy
CVS: Normal heart sounds
RESP: good air entry bilaterally, no crackles/wheezes
GI: Mild generalized tenderness, no focal, no rebound/guarding, no hepatosplenomegally
GU: nil
MSK: the RN draws your attention to some petechiae that have occurred after the blood pressure cuff cycled.

QUESTIONS:

1) **What is your differential diagnosis? What are you most worried about?**

2) **What is your initial management?**

3) **What investigations would you order?**

INVESTIGATIONS:

CBC: Hb 140, Plts 85, WBC 15 (mostly lymphs), HCT 65%
Lytes: normal Cr: 130, BUN 20, Glucose 13
LFTs: mild elevations of transaminases

QUESTIONS:

1) **What is your disposition for this patient?**

2) **After talking to your staff, you believe the most likely dx is Dengue Fever. Are there any ways to tell if this will progress to a more severe form?**

3) **How can you confirm the diagnosis?**

PROGRESSION:

The patient was consulted to medicine early on in your shift. Hours later you're wrapping up when the RN calls you to the patients bedside. He now looks acutely unwell and she has reported the patient had a large amount of hematochezia
HR 135, BP 90/50, RR 28, SpO2 98% RA, Temp 37.2 (no antipyretics given)
Patient is pale and has a morbilliform rash to his trunk. Drowsy with active hematochezia.

INVESTIGATIONS:

CBC: HB 115, Plts 70, WBC 20
Lytes: Na 129, normal K/Cl, glc 3.5
VBG: pH 7.10 CO2 30 Bicarb 10
Lactate 3.5
LFTs: rising transaminases
INR: 3.2, PTT 46

Questions:

1) **How would you manage this patient?**

2) **What is a key aspect of Dengue Hemorrhagic Fever that the admitting team should anticipate**

Please come up with 3-4 key points you learned about the diagnosis and management of Dengue to share with the group.

Learning Objectives:

1) Approach to the assessment of fever in the returning traveller
2) Diagnosis of Dengue Fever
3) Management of Dengue Hemorrhagic Fevers