

Use the case studies below to practice building a differential workup in VisualDx. Enter the symptoms presented in each case and see if you can reach the correct diagnosis for each patient.

## QUIZ 1

A **37-year-old man** went to his primary care doctor complaining of **fever, nausea, and abdominal pain**. He had attributed these symptoms to his recent **trip to Japan**, where he ate lots of new **foods** along with old favorites like **sushi**. However, when a **pruritic, serpiginous lesion** appeared on his flank, he became concerned.

- A. Cutaneous larva migrans
- B. Gnathostomiasis
- C. Loiasis
- D. Strongyloidiasis

*HINT: Start with chief complaint of "fever."*

## QUIZ 2

A **2-year-old boy** was brought to the pediatrician by his parents after they saw a **smooth nodule** appear on his **face**. About a week earlier they had noticed a small **lump** on his **testicle**. They had also noticed that he had been going through diapers more quickly because he seemed to be **urinating more frequently**.

- A. Neuroblastoma
- B. Merkel cell carcinoma
- C. Rhabdomyosarcoma
- D. Epidermoid cyst

*HINT: Start with chief complaint of "single skin lesion."*

## QUIZ 3

A **35-year-old woman** who normally **wears contact lenses** visited the ED with **ocular pain, photophobia, and blurred vision** that had developed over the **last several weeks** in her right eye. Upon exam, the doctor saw a **diffuse white infiltrate** on her **cornea**. The doctor started her on antibiotic medication, but it did not help, and she returned to the ED after a few days.

- A. Fungal corneal ulcer
- B. Bacterial keratitis
- C. Corneal foreign body
- D. Herpes simplex virus (HSV) keratitis

*HINT: Start with chief complaint of "ocular pain."*

## QUIZ 4

A **45-year-old woman** went to urgent care after a **reticular hyperpigmented** patch of skin appeared on her **back** where she had been using a heating pad to relieve myalgia after working in her garden. She told the doctor that she had inadvertently fallen asleep with the **heating pad** on the area, so although she hadn't burned herself the **heat** was applied continually for several hours.

- A. Livedo reticularis
- B. Cholesterol emboli
- C. Erythema ab igne
- D. Systemic lupus erythematosus

*HINT: Start with chief complaint of "rash."*

## QUIZ 5: CHALLENGE!

A **25-year-old male** in the **military** who is serving in a tropical climate had initial symptoms of remittent **fever**, **chills**, **severe headache**, and **low back pain**. The patient also has **vomiting**, **jaundice**, and **desquamation**. During the patient's active duty, he was exposed to **flood water**.

Can you make the diagnosis without multiple choice? What's your answer?

*HINT: Start with chief complaint of "fever."*

## QUIZ 6

A **26-year-old man** went to his primary care physician with a sudden onset of flu-like symptoms including **fever**, **chills**, **muscle aches**, **pleuritic chest pain**, and a **dry cough**. He remarked that he felt terrible, but at least he had been healthy 2 weeks ago, when he and his girlfriend were vacationing in **Costa Rica**. He pulled out his phone and started sharing pictures of their **spelunking** trip – stalactites, stalagmites, and **bats**.

- A. Coccidioidomycosis
- B. Blastomycosis
- C. New World cutaneous leishmaniasis
- D. Histoplasmosis

*HINT: Start with chief complaint of "fever."*

## QUIZ 7: CHALLENGE!

A **52-year-old man** went to his primary care doctor complaining of a fine **scaly plaque** that was **pruritic**. It was primarily on his **arms** and **legs** and had **developed over the last few months** since he started using his new **hot tub** regularly. His doctor noted his **history of hypothyroidism** when reviewing his chart.

Can you make the diagnosis without multiple choice? What's your answer?

*HINT: Start with chief complaint of "rash."*

## QUIZ 8

A **19-year-old man** presented at the ED **vomiting blood**. He mentioned that he had several **nosebleeds** that week, but didn't think anything of it as he frequently suffered from nosebleeds. "It runs in the family. My dad gets them all the time too," he said. Upon exam, his physician noticed an **oral red macule** on his **tongue** and slight **conjunctival injection**.

- A. Idiopathic thrombocytopenic purpura
- B. Hereditary hemorrhagic telangiectasia
- C. CREST syndrome
- D. Mucormycosis

*HINT: Start with chief complaint of "vomiting blood."*

## QUIZ 9

An **80-year-old woman** who was wheelchair bound due to **congestive heart failure** was brought to the ED complaining of left-sided **chest pain**, **shortness of breath**, **cough**, and **syncope**. An EKG showed **tachycardia**.

- A. Pulmonary embolism
- B. Chronic obstructive pulmonary disease
- C. Pneumothorax
- D. *Streptococcus pneumoniae* Pneumonia

*HINT: Start with chief complaint of "chest pain."*