Inflammatory Bowel Disease

Institution Affiliations

Name

Date

Scenario: The patient described in this case study is admitted to your hospital unit with the diagnosis of Inflammatory Bowel Disease, rule out pancreatitis.

Step 1: Review the case study

Step 2: Review the pathophysiology of Inflammatory bowel disease and pancreatitis.

Step 3: Describe the aspects of the case study consistent with each disease.

Step 4: Determine if the diagnosis of IBD seems most plausible.

A 63 year old white female is presenting with complaints of nausea and abdominal discomfort (6/10), with occasional vomiting or diarrhea, weight loss and lack of appetite. Four weeks ago she was seen in clinic for an exacerbation of Crohn's disease (CD), which was treated with a prednisone taper (60 mg x 7 days; 40 mg x 7 days, 20 mg x 7 days, 10 mg x 7 days).

Ten days ago she was in the clinic complaining of abdominal discomfort (5/10), with occasional vomiting or diarrhea. The following labs and diagnostics were done at that time:

Gallbladder ultrasound: thickening of the walls with sludge in the common bile duct

Alk Phos: 186

AST: 45

ALT: 36

The provider considered the test results inconclusive, began symptom management (Promethazine 25, mg po q 6 hours) and instructed the patient to return in one week or sooner if symptoms worsened.

Today the patient returned to the provider complaining of significant upper abdominal discomfort. She has lost 8 lbs over the course of the month and has been seen by her physician several times in the past month. She is direct admitted to the hospital for worsening symptoms.

PMH: Crohn's Disease (with extra intestinal manifestations), Diabetes Type 2, Hypertension, Bipolar disorder, COPD

Allergies: penicillin, IV contrast dye,

Medications: mesalamine 500 mg QID, Sitagliptin/metformin 50/500 mg daily, lisinopril 5 mg daily, mercaptopurine 50 mg BID, omega 3 acid supplement, Cymbalta , prednisone taper (currently at 10 mg/day)

Social history:

She lives with her husband and has 3 adult children, all in good health. She is currently on disability for her bipolar disorder diagnosis. She smokes half a pack per day for 30 years. Denies drugs of abuse or alcohol use. She rarely exercises. Diet consists of frequent, small, bland meals.

Family history:

Mother: Alcoholism, bipolar disorder, deceased at 68

Father: Diabetes, CAD, alive at age 72

Review of Systems:

Constitutional: Reports anorexia and weight loss

HEENT: denies decreased hearing; blurring, diplopia, irritation, discharge, vision loss, eye pain, photophobia; ear pain or discharge, tinnitus; nasal obstruction or discharge, nosebleeds; sore throat, hoarseness, dysphagia

Cardiovascular: denies dyspnea on exertion; denies chest pains, palpitations, syncope, orthopnea, PND, edema

Respiratory: denies cough and wheezing

Gastrointestinal: denies jaundice

Genitourinary: denies incontinence, dysuria, hematuria, urinary frequency Musculoskeletal: denies joint pain, joint swelling, muscle cramps, muscle weakness, stiffness

Skin: denies rash, dryness, suspicious lesions

Neurologic: chronic weakness in her left knee; denies transient paralysis, paresthesias, seizures, syncope, tremors, vertigo

Psychiatric: denies depression, anxiety, memory loss, mental disturbance, suicidal ideation, hallucinations, paranoia

Endocrine: denies cold intolerance, heat intolerance, polydipsia, polyphagia, polyuria Heme/lymphatic: denies bruising, bleeding, enlarged lymph nodes Allergic/Immunologic: denies urticaria, hay fever, persistent infections, HIV exposure

Physical Examination

Vitals: T: 98.7, P 82, R, 16, BP, 116/82, Sp02 97% on room air

Pain 6/10

General: Obese, oriented, no acute distress

HEENT:

Head: Positive for occasional headaches

Eyes: Conjunctivae and lids normal, sclera jaundiced, pupils equal, round, reactive to light and, accommodation, discs sharp and flat, no a/v nicking, hemorrhages, or exudates, normal visual acuity, EOM intact.

Ears: External ears normal, no lesions or deformities; external nose normal, no lesions or deformities; canals clear bilaterally, tympanic membranes intact with good movement, no fluid; hearing grossly intact bilaterally

Nose: nasal mucosa, septum, and turbinates normal; poor dentition and missing a few teeth on both sides of top and bottom but does not wear dentures

Throat: tongue normal, posterior pharynx without erythema or exudates; Neck is supple, no masses, trachea midline; no thyroid nodules, masses, tenderness, or enlargement

Respiratory: Clear to auscultation bilaterally, normal tactile fremitus, no egophony, normal respiratory effort with no use of accessory muscles.

Cardiovascular: S1, S2, normal rhythm, no murmur, rub, or gallop; no thrill or palpable murmurs on palpation, no JVD, no displacement of PMI; no carotid or abdominal bruits; no enlargement of abdominal aorta. Carotid, radial, posterior tibialis, and pedal pulses 2+ symmetric, no edema

Gastrointestinal: Obese, soft, abdomen with no masses; bowel sounds hyperactive, liver size appears within normal limits but not measured in midclavicular and midsternal line because of RUQ pain and tenderness to palpation; no liver nodularity or masses, no splenomegaly

Rectal Exam: No rashes, lesions or sores, guaiac positive stool

Lymph Nodes: No cervical, clavicular, or posterior auricular lymphadenopathy

Skin: Spider angiomas on trunk and arms, No ulcerations, subcutaneous nodules or induration

Musculoskeletal: Normal alignment, mobility and no deformity of head and neck, spine, ribs, pelvis; normal ROM and 4/5 strength in all extremities, no joint enlargement or tenderness; no clubbing, cyanosis, petechiae, or nodes of digits

Neurologic: Cranial nerves: II - XII grossly intact; 2+, symmetric, reflexes; intact to touch, pin, vibration, and position in lower extremities; normal finger-to-nose, Romberg and Pronator drift WNL.

Mental Status Exam: Judgment and insight intact; oriented to time, place, and person; intact memory for recent and remote events; no depression, anxiety, or agitation

Diagnostics:

WBC: 12,900

RBC: 6.1 million/mm3

Hemoglobin: 10.7

Hematocrit: 32.9

Platelets; 312

BUN: 29

Cr: 1.7

Na: 129 mEq/L

K: 4.2 mEq/L

Ca: 9.8 mg/dl

Mg 1.3 mg/dl

Cl: 101 mEq/L

HCO3: 25 mEq/L

Phosphate: 3.2 mg/L

Glucose: 186 mg/dl

Total Bilirubin 3.2

Conjugated bilirubin: 1.2

AST 134

ALT 153

Alk Phos 88

GGT 53

Albumin 4.6

Lipase 260

Amylase 124

Antimitochondrial Antibody (AMA): 0.1-0.3 Units

CT Abdomen is ordered, results not back.

Review of the Case Study

The case study presents a patient who is complaining of nausea, abdominal discomfort, vomiting and diarrhea, weight loss and lack of appetite. The patient was in the clinic four weeks ago and diagnosed with Crohn's disease. From the review of the case study and the diagnosis done by the clinicians, the patient was suffering from the Crohn's disease, which is an inflammatory bowel disease. Crohn's disease is a condition in the gastrointestinal tract that causes abdominal pain, fatigue, loss of weight, vomiting, and diarrhea. The fact that the patient has gone today to the hospital with complaints of abdominal discomfort, and has lost 8 lbs in the last one month, it is an indication the patient was suffering from the Inflammatory Bowel Disease.

Pathophysiology of Inflammatory Bowel Disease

Inflammatory bowel disease usually occurs at any age to the old people and the young adults. The pathogenesis of the inflammatory bowel disease is unknown, however; stress and dies may aggravate the disease. Studies have also shown that the disease is genetically inherited, and environmental factors play a big role in the development of the disease. The gastrointestinal tract of the patient contains harmless bacteria that help in digestion (Shivashankar et al., 2017). The immune system usually attacks and kills any foreign object such as bacteria and viruses. The harmless bacteria in the intestines are usually protected from any attack, but for the b people with inflammatory bowel disease, the harmless bacteria are mistaken are foreign objects, and are attacked by the immune system. In this case, cells normally travel from the blood to the intestines producing the inflammation. The inflammation fails to subside, this leads chronic inflammation, thickening the walls of the intestine, abdominal pain, and eventually leading to the symptoms the patient is complaining about such as vomiting and diarrhea (Storr et al., 2014). Inflammatory bowel disease can be hereditary, so when one of the parents has the disease, there is a likelihood of the children suffering. Environmental factors also cause eh disease because it is normally prevalent in the developed countries and not in underdeveloped counties, and more in urban areas than in rural areas.

Aspects of the Case Study consistent the disease

Some of the aspects of the case study that is consistent with the disease include the following.

The patient in the case study is complaining of the abdominal pain, occasional vomiting, and diarrhea. These symptoms of the disease are associated with the inflammation of the intestinal walls. The patient has had weight loss that is caused by loss of appetite, and this makes the patient feel weak and fatigued. Today, the patient has reported to the hospital when the disease is active

with symptoms such as severe abdominal pain and weight loss of 8lbs, which are good indications that the patient is suffering from Crohn's disease.

The most plausible diagnosis of IBD

The diagnosis starts with the patient history and the physical examination. In this case, the patient is required to provide all information about the symptoms related to the disease. This is followed by the genetic testing identifies if there is a relative who may have had the disease. Having an immediate family member with the disease is one of the risk factors for having the Crohn's disease (Loftus, 2017). Genetic testing will help the physician to make appropriate treatment decisions. The physicians use the blood and stool tests to determine the inflammation in the body. Specialized blood tests such as the serology tests are done to determine the source of the inflammation. The disease is then treated with anti-inflammatory drugs, which includes corticosteroids and aminosalicylates. Some of the recommended drugs include mesalamine, balsalazide, and the olsalazine. The other treatment includes the immune system suppressors, which includes azathioprine, mercaptopurine, cyclosporine, and methotrexate (Loftus, 2017). Other medications include calcium, iron and vitamin D supplements.

References

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