

SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES





INFLAMMATORY BOWEL DISEASE

DEFINITION

Inflammatory bowel disease (IBD) is a group of inflammatory conditions of the colon and small intestine.

Ulcerative colitis and Crohn's disease are the principle types of IBD.

Ulcerative colitis

Inflammation of the rectal and sigmoid colon (40-50%) called proctitis. 40% is left sided colitis.

20% is about extensive colitis.

Crohn's disease

Inflammation of the ileum and caecum (ileo-caecal) region is about 40%. 30-40% inflammation in segments of small intestine cause skip lesions. 10% is perianal.

20% is Crohn's colitis.

SYMPTOMS

Diarrhoea

Abdominal pain

Rectal bleeding

Tenesmus

Fever, vomiting

Cramps and muscle spasm

ETIOLOGY

Genetics (anti microbial peptides).

Diet

Cytokine response

Smoking

NSAIDS

Stress

DIAGNOSIS

Chronic diarrhoea lasts for More than 4 weeks.

Endoscopy

Biopsy

TREATMENT

Mesalazine therapy- which reduce acute inflammation.

Corticosteroids- for immune suppression

Fluids for dehydration

TNF alpha antagonists like infliximab, adalimumab.

JAUNDICE

INTRODUCTION

Jaundice also known as icterus, is a yellowish or greenish pigment of the skin and sclera due to high bilirubin level in blood.

Normal level of bilirubin: 1.0 mg/dl

Hyperbilirubinemia: 2-3 mg/dl.

EPIDEMIOLOGY

Jaundice in adults is rare.

Under the five year DISCOVERY programme in the UK, annual incidence of jaundice was 0.74 per 1000 individuals over age 45.

Jaundice is commonly associated with severity of disease with an incidence of up to 40% of patients requiring intensive care in ICU experiencing jaundice.

ETIOLOGY

Pre-hepatic/hemolytic: The pathology occurs prior to the liver metabolism, due to either intrinsic causes to red blood cell rupture or extrinsic causes to red blood cell rupture.

Hepatic/hepatocellular: The pathology is due to damage of parenchymal liver cells.

Post-hepatic/cholestatic: The pathology occurs after bilirubin conjugation in the liver, due to obstruction of the biliary tract and/or decreased bilirubin excretion.

PATHOGENESIS

Pre hepatic causes

Pre-hepatic jaundice is most commonly caused by a pathological increased rate of red blood cell (erythrocyte) hemolysis.

The increased breakdown of erythrocytes \rightarrow increased unconjugated serum bilirubin \rightarrow increased deposition of unconjugated bilirubin into mucosal tissue. The following diseases may cause jaundice due to increased erythrocyte hemolysis:

Sickle cell anemia
Thalassemia
Pyruvate kinase deficiency
Haemolytic anemia.

Hepatic causes

Hepatic jaundice is caused by abnormal liver metabolism of bilirubin.

The major causes of hepatic jaundice are significant damage to hepatocytes — due to infectious, drug/medication-induced, auto-immune etiology — or, less commonly, due to inheritable genetic diseases.

The following is a non-exhaustive list of hepatic causes to jaundice:

Acute and chronic hepatitis

Hepatotoxicity

Drug induced hepatitis

Alcoholic liver disease

Cirrhosis

Post hepatic causes

Post-hepatic jaundice (obstructive jaundice), is caused by a blockage of bile ducts which transport bile containing conjugated bilirubin out of the liver for excretion.

The following is a list of conditions that can cause post-hepatic jaundice:

Acute and chronic pancreatitis

Choledocholithiasis

Biliary atresia

Pancreatic cancer

Cholangitis

DIAGNOSIS

Bilirubin test

Viral test for hepatitis

Liver function test

Blood count

Abdominal CT scan

Abdominal Ultrasound

Liver biopsy

Cholesterol level estimation

TREATMENT

Iron supplements for anemia induced jaundice.

Anti viral drugs for Hepatitis.

Iv fluid administration

Diet and vitamin D, K supplements.