B. A. Part -II
Paper – III
Unit – VIII
Dietetics
Topic – Liver – Types and Treatment

Dr. Deepika Taterway
Assistant Professor,
Guest Faculty
Dept. Of Home Science
M. M. C., P. U., Patna

There are three main types of jaundice:

Hepatocellular jaundice occurs as a result of liver disease or injury.

Hemolytic jaundice occurs as a result of hemolysis, or an accelerated breakdown of red blood cells, leading to an increase in production of bilirubin.

Obstructive jaundice occurs as a result of an obstruction in the bile duct. This prevents bilirubin from leaving the liver

Newborns

Jaundice is a common health issue in newborn infants. Around 60 percent of newborns experience jaundice, and this increases to 80 percent of premature infants born before 37 weeks of pregnancy.

They will normally show signs within 72 hours of birth.

Red blood cells in the body of an infant are frequently broken down and replaced. This causes the production of more bilirubin. Also, the livers of infants are less developed and, therefore, less effective at filtering bilirubin from the body.

Symptoms will usually resolve without treatment within 2 weeks. However, infants with extremely high bilirubin levels will require treatment with either a blood transfusion or phototherapy.

In these cases, treatment is vital as jaundice in newborns can lead to kernicterus, a very rare type of permanent brain damage.

Treatment

Medication or supplements can help jaundice depending on the cause.

Treatment will depend on the underlying cause.

Jaundice treatment targets the cause rather than the jaundice symptoms.

The following treatments are used:

Anaemia-induced jaundice may be treated by boosting the amount of iron in the blood by either taking iron supplements or eating more iron-rich

foods. Iron supplements are available for purchase online.

Hepatitis-induced jaundice requires antiviral or steroid medications.

Doctors can treat obstruction-induced jaundice by surgically removing the obstruction.

If the jaundice has been caused by use of a medication, treatment for involves changing to an alternative medication.

Prevention

Jaundice is related to liver function. It is essential that people maintain the health of this vital organ by eating a balanced diet, exercising regularly, and not consuming more than the recommended amounts of alcohol.

Levels

The level of bilirubin is defined in a blood test called a bilirubin test. This measures unconjugated, or indirect, bilirubin levels. These are responsible for the onset of jaundice.

Bilirubin levels are measured in milligrams per decilitre (mg/dL). Adults and older children should have a level of between 0.3 and 0.6 mg/dL. Around 97 percent of infants born after 9 months of pregnancy have levels lower than 13 mg/dL. If they show higher levels than this, they are usually referred for further investigation.

These ranges may differ between laboratories. How far above the normal range a person's levels are will set out a course of treatment.

Diagnosis

Doctors will most likely use the history of the patient and a physical exam to diagnose jaundice and confirm bilirubin levels. They will pay close attention to the abdomen, feel for tumors, and check the firmness of the liver.

A firm liver indicates cirrhosis, or scarring of the liver. A rock-hard liver suggests cancer.

Several tests can confirm jaundice. The first is a liver function test to find out whether or not the liver is functioning properly.

If a doctor cannot find the cause, a doctor may request blood tests to check bilirubin levels and the composition of the blood. These include:

Bilirubin tests: A high level of unconjugated bilirubin compared to levels of conjugated bilirubin suggest hemolytic jaundice.

Full blood count (FBC), or complete blood count (CBC): This measures levels of red blood cells, white blood cells, and platelets.

Hepatitis A, B, and C tests: This tests for a range of liver infections.

The doctor will examine the structure of the liver if they suspect an obstruction. In these cases, they will use imaging tests, including MRI, CT, and ultrasound scans.

They may also carry out an endoscopic retrograde cholangiopancreatography (ERCP). This is a procedure combining endoscopy and X-ray imaging.

A liver biopsy can check for inflammation, cirrhosis, cancer, and fatty liver. This test involves inserting a needle into the liver to obtain a tissue sample. The sample is then examined under a microscope.