ASIBOR OSEMHANHU IMMANUELLA

18/mhs01/087

ANATOMY

WHY DO WE HAVE THE LIVER RECEIVING MORE BLOOD FROM THE VEIN THAN FROM THE ARTERIES

In the hepatic portal system, the liver receives a dual blood supply from the hepatic portal vein and hepatic arteries. The hepatic portal vein carries venous blood drained from the spleen, gastrointestinal tract and its associated organs; it supplies approximately 75% of the liver’s blood. The hepatic arteries supply arterial blood to the liver and account for the remainder of its blood flow.

Oxygen is provided from both sources; approximately half of the liver’s oxygen demand is met by the hepatic portal vein, and half is met by the hepatic arteries.

DISEASES OF THE LIVER

* Alagille Syndrome is an inherited disorder that closely resembles other forms of liver disease seen in infants and young children. However, a group of unusual features affecting other organs distinguishes Alagille syndrome from the other liver and biliary diseases of infants.
* Autoimmune hepatitis is a disease in which the body’s own immune system attacks the liver and causes it to become inflamed. The disease is chronic, meaning it lasts many years. If untreated, it can lead to cirrhosis and liver failure.

There are two forms of this disease. Type 1, or classic, autoimmune hepatitis is the more common form. This is the form that mostly affects young women and is often associated with other autoimmune diseases. Type 2 autoimmune hepatitis is less common and generally affects girls between the ages of 2 and 14.

* Galactosemia is an inherited disorder that prevents a person from processing the sugar galactose, which is found in many foods. Galactose also exists as part of another sugar, lactose, found in all dairy products.

Normally when a person consumes a product that contains lactose, the body breaks the lactose down into galactose and glucose. Galactosemia means too much galactose builds up in the blood. This accumulation of galactose can cause serious complications such as an enlarged liver, kidney failure, cataracts in the eyes or brain damage. If untreated, as many as 75% of infants with galactosemia will die.

Duarte galactosemia is a variant of classic galactosemia. Fortunately, the complications associated with classic galactosemia have not been associated with Duarte galactosemia.

There is some disagreement over the need for dietary restriction in the treatment of children with Duarte galactosemia. Consult your healthcare professional for his or her advice on this topic.

* Jaundice is the yellowing of the skin and eyes. It results from having too much bilirubin in the blood. Bilirubin is a yellow substance made from the breakdown of red blood cells.

Most newborns develop jaundice. Jaundice in newborns is usually mild and goes away within one to two weeks. However, babies with jaundice need to be regularly seen by a doctor because severe jaundice can cause brain damage.

The American Academy of Pediatrics (AAP) recommends that every newborn be checked for jaundice before leaving the hospital and three to five days after birth.

* Hepatitis B is a high preventable liver disease caused by the hepatitis B virus (HBV). HBV causes the liver to swell and prevents it from working well.

About 95% of adults who are exposed to HBV fully recover within 6 months (acute HBV) without medication. About 5% have HBV all their lives (chronic HBV) unless they are successfully treated with medications. Infants born to mothers infected with HBV are at high risk of developing chronic HBV. Chronic HBV can lead to cirrhosis (scarring) of the liver, liver cancer, and liver failure.