

EXPERTS SAY LIVER DISEASE IN BABIES NEEDS EARLY DIAGNOSIS, TREATMENT

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indicator is jaundice, the yellowing of the eyes and skin, that persists beyond 10 to 14 days.

"In healthy newborns, mild jaundice typically resolves within the first two weeks of life. When it does not, medical attention is urgently needed," Kakembo says.

Another key sign is white or clay-coloured stools. Kakembo explains that the brownish colour of normal stools comes from bile, a fluid produced by the liver.

"In biliary atresia, the abnormal connection between the liver and intestines prevents bile from reaching the gut, resulting in pale stools," he says.

Kakembo says other symptoms include dark urine caused by a build-up of bile in the bloodstream, an enlarged liver and abdominal swelling due to fluid accumulation in the belly (ascites).

DIAGNOSIS

Diagnosis begins with a clinical history of jaundice and white stools persisting beyond two weeks, followed by liver function tests. Kakembo says doctors specifically look for elevated direct bilirubin, a yellowish pigment produced when red blood cells break down. If the direct bilirubin level exceeds 20% of the total bilirubin, it is a strong indicator of liver disease.

ASSOCIATED ORGAN ABNORMALITIES

Babies with biliary atresia sometimes present with other structural abnormalities. Paediatric surgeon Dr Rovine Naluyimbazi says some infants are born with organs positioned on the wrong side of the body; for example, the heart on the right side of the chest, often accompanied by cardiac defects such as holes in the heart.

"The liver may grow on the left side of the abdomen instead of the right, and the intestines may be misarranged. Some children are also born with multiple small accessory spleens, a condition known as polysplenia," she says.

An ultrasound scan is then used to check whether the gallbladder has developed properly and to assess the state of the liver and biliary system. If the scan is inconclusive, doctors may proceed to more advanced imaging such as magnetic resonance cholangiopancreatography, a technique Kakembo says is both expensive and scarce in Uganda.

COMPLICATIONS

Bile plays a critical role in digestion, particularly in the absorption of fat-soluble vitamins A, D, E, and K.

Dr Rovine Naluyimbazi, a paediatric surgeon at Mulago Hospital, explains that when bile cannot flow from the liver to the intestines (biliary obstruction or cholestasis), severe nutritional deficiencies can develop, leading to

complications such as bone fractures and abnormal bleeding from the mouth, nose, and skin.

"Other serious risks include portal hypertension (elevated blood pressure in the veins supplying the liver) and cirrhosis, in which the liver progressively shrinks and fails.

"Infants may also develop ascites (a dangerous accumulation of fluid around the abdomen), malnutrition due to low albumin levels, and ultimately liver failure if left untreated," Naluyimbazi says.

PREVENTION

Dr Kakembo says there is currently no known way to prevent biliary atresia. However, he emphasises that early identification of symptoms dramatically improves outcomes.



Paediatrics: Naluyimbazi

"Identifying the condition and beginning treatment within two weeks of birth gives a child the best chance of surviving with their native liver," Kakembo says.

TREATMENT, SURGERY

The primary treatment for biliary atresia is a surgical procedure known as the Kasai operation. Naluyimbazi explains that the surgeon removes the defective bile ducts and creates a new passage for bile to flow from the liver to the intestine. Ideally, the procedure is performed within the first 60 days of life; the critical window during which outcomes are most favourable.

"The surgery typically takes two to three hours. Following the procedure, the infant is usually hospitalised for one to two weeks and placed on medication to promote bile flow and support recovery."

Naluyimbazi says a liver transplant becomes necessary when the Kasai procedure

fails to establish bile flow or when intervention is delayed beyond the recommended window.

"The longer the delay, the greater the liver damage and the lower the chance of restoring normal function," she says.

RACE AGAINST TIME

Michael Semanda, a nurse in the paediatric ward at Mulago Hospital, says most families arrive too late.

"Many parents first take their children to lower-level health facilities that lack the equipment and specialists to diagnose the disease. By the time they reach us, critical time has been lost. Finances are also a major barrier to timely monitoring and treatment," he says.

COST OF TREATMENT

At Mulago Hospital, the Kasai procedure itself is performed free of charge. However, post-operative care in the intensive care unit (ICU), which provides around-the-clock specialised monitoring, carries an additional cost. Naluyimbazi says for families who cannot afford ICU fees, the hospital waives the charges.

"Ideally, all post-surgery children should be in the ICU, but those who cannot afford it are still treated and monitored, and they do well. Private hospitals charge varying fees depending on the length of admission," she says.

COMMONLY MISTAKEN FOR OTHER CONDITIONS

Because jaundice is a symptom shared by many neonatal illnesses, parents and even some health workers may initially misidentify biliary atresia. Similar presentations occur in blood group incompatibilities, sepsis, breastfeeding jaundice, and haemolytic anaemia.

A common practice among parents is placing jaundiced infants in morning sunlight to help break down bilirubin. Surgeon Dr Rovine Naluyimbazi cautions that while this may be harmless in mild, early cases, it is not a substitute for medical care.

"If the jaundice persists after 14 days and nothing has changed, do not continue placing the child in the sunshine. Seek medical attention at a regional referral hospital," she says.

Dr Nasser Kakembo, a senior surgeon, warns strongly against the use of herbal remedies.

"When a child is given herbal concoctions, whether medicine or leaves, these are toxic that must be processed by a liver that is already damaged. You are only making the condition worse," he says.