

BILIARY ATRESIA: LIVER FAILURE IN BABIES

PHOTOS BY FRED MUBANDA

Often dismissed as normal newborn jaundice, biliary atresia is a rare but life-threatening condition in which a baby's bile ducts are blocked or absent, preventing bile from draining from the liver. This silent disease can quickly lead to severe liver damage, and by the time it is recognised, it is often too late to save lives, writes **Fred Mubanda**.

When Juliana Nalubanga Sengendo, a resident of Buwate in Kira municipality, Wakiso district, gave birth to a baby girl at Mengo Hospital in Kampala on May 25, 2022, everything appeared normal. Mother and daughter, named Nicole Nabbumba Sengendo, were discharged without concern.

Two weeks later, Sengendo noticed a faint yellowish tinge in her daughter's eyes. She did not worry much at first. It was only when the child developed a severe cough and flu that she sought medical attention.

"We took the child to St Catherine Hospital on Buganda Road in Kampala, where the doctor also noticed the yellow colouring in her eyes. We were admitted immediately," Sengendo says.

Liver function tests revealed abnormal enzyme levels. A subsequent MRI (magnetic resonance imaging) scan at Nakasero Hospital returned normal results, but the baby soon began passing white stool, a telltale sign of bile obstruction. The family then turned to Mulago Hospital, where doctors made a diagnosis that would change their lives: biliary atresia, a

condition in which the bile ducts are blocked, preventing digestive fluid from draining from the liver.

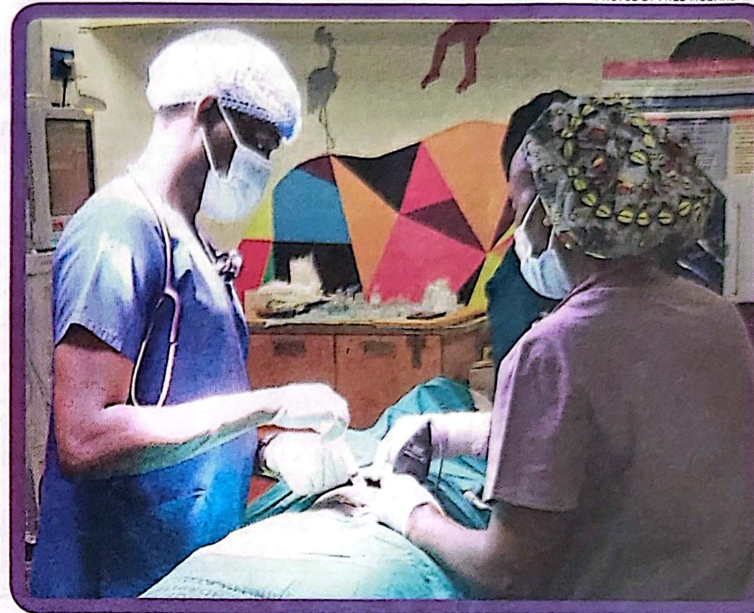
"The doctor told us that a baby with biliary atresia should ideally undergo surgery before eight weeks of age," she recalled.

Sengendo said her daughter was already 10 weeks old, but she underwent the Kasai procedure, a surgery that connects the liver directly to the intestine to allow bile to drain.

The surgery was technically successful, but it could not halt the underlying destruction of the liver ducts. By the age of two, Nabbumba required a liver transplant. The family travelled to India, where the procedure was performed. Today, the child is healthy with normal liver function.

Biliary atresia is a condition in which a newborn's bile ducts, the vessels connecting the liver to the intestine, are either blocked or fail to develop properly. Dr Nasser Kakembo, a senior lecturer and paediatric surgeon at Mulago Hospital in

Surgeons at Mulago National Referral Hospital operating on a child. Early detection is crucial in managing biliary atresia, doctors say



Juliana Nalubanga Sengendo with her daughter, Nicole Nabbumba, who underwent a successful liver transplant

GIRLS MORE AFFECTED

The condition affects girls more than boys, at a ratio of approximately 3:2. Biliary atresia is not a genetic disease and does not commonly recur within the same family.

Kampala, says the disease is becoming increasingly common in Uganda.

"In a study

we conducted in 2017, we recorded about 40 children with biliary atresia in a single year," he says. "But over the years, we have been receiving two to five babies with the condition every month in our ward at Mulago. The numbers are overwhelming, and we are now seeking approval from the research committee to repeat the study."

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CAUSES

The exact cause of biliary atresia remains unclear. Kakembo believes it may be linked to infections contracted by the mother during

pregnancy, particularly viral infections such as cytomegalovirus, syphilis and toxoplasmosis; conditions that are routinely screened for during antenatal care.

"We think these infections may trigger a reaction that damages the ducts of the liver," he explains.

There are also other unexplored possibilities; perhaps a toxin or an autoimmune reaction in which the body attacks its own ducts. These are still theories being investigated to understand the true cause.

SYMPTOMS

The symptoms of biliary atresia can appear from birth. The most prominent early

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