Source : www.thehindu.com Date : 2022-05-15

BLOOD MARKER IDENTIFIED FOR BABIES AT RISK OF SIDS

Relevant for: Science & Technology | Topic: Biotechnology, Genetics & Health related developments

A team of Australian researchers have identified a biochemical marker in the blood that could help identify newborn babies at risk for sudden infant death syndrome (SIDS), a breakthrough they said creates an avenue to future tragedy-preventing interventions.

In their study, babies who died of SIDS had lower levels of an enzyme called butyrylcholinesterase (BChE) shortly after birth, the researchers said. BChE plays a major role in the brain's arousal pathway, and low levels would reduce a sleeping infant's ability to wake up or respond to its environment.

The findings not only offer hope for the future, but answers for the past, study leader Dr. Carmel Harrington of The Children's Hospital at Westmead, Australia said in a statement.

"An apparently healthy baby going to sleep and not waking up is every parent's nightmare and until now there was absolutely no way of knowing which infant would succumb," Dr. Harrington said. "But that's not the case anymore. We have found the first marker to indicate vulnerability prior to death."

Using dried blood spots taken at birth as part of a newborn screening program, Dr. Harrington's team compared BChE levels in 26 babies who later died of SIDS, 41 infants who died of other causes, and 655 surviving infants.

The fact that levels of the enzyme were significantly lower in the infants who subsequently died of SIDS suggests the SIDS babies were inherently vulnerable to dysfunction of the autonomic nervous system, which controls unconscious and involuntary functions in the body, the researchers said.

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