Five cases of neonatal enterovirus infection have been reported in San Diego, highlighting the risks and need for timely identification and treatment, according to data published in the July 11 issue of the U.S.
Ryan Sanchez, M.D., from the University of California, San Diego, and colleagues describe five cases of neonatal enterovirus infection identified at Rady Children's Hospital in San Diego.

The researchers note that based on characteristic clinical presentations during enterovirus seasons, all five cases were initially suspected to be caused by enterovirus, which was supported by positive rhinovirus-enterovirus results from respiratory virus panel testing of nasopharyngeal specimens. For four of the five patients, plasma tested positive for enterovirus by reverse transcription-polymerase chain reaction (RT-PCR). Two patients had positive RT-PCR testing of cerebrospinal fluid for enterovirus. Four and three infants had thrombocytopenia and hepatitis with coagulopathy, respectively. In three neonates, serum ferritin levels were elevated. Seizures were the initial sign in one neonate, who subsequently developed pancytopenia with suspected, but unconfirmed, viral-induced hemophagocytic lymphohistiocytosis. The most severely affected patient, aged 5 days, developed multiorgan failure; his mother experienced a febrile illness during delivery, which was diagnosed as chorioamnionitis. The infant received multiple immune globulin intravenous (IGIV) doses, the investigational drug pocapavir, and maternal convalescent plasma, but did not survive. Four of the infants received IGIV therapy. Mothers of three infants were diagnosed with chorioamnionitis before delivery and the mother of the remaining two infants received a diagnosis of endometritis.

"Timely identification facilitates optimal clinical management for the infant, which might include receipt of IGIV and possibly antiviral medication," the authors write.

More information: [Abstract/Full Text]