HCV Screening Urged in Pre-1992 NICU Patients

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Admission to a neonatal intensive care unit before July 1992 should be considered a risk factor for hepatitis C virus infection because patients may have received tainted transfusions, results of a new study suggest.

Among the estimated 3.9 million Americans infected with hepatitis C virus (HCV), approximately 7% are thought to have acquired the virus through transfusion before blood banks implemented screening with the second-generation HCV antibody enzyme immunoassay. Neonates who required care in the neonatal intensive care unit (NICU) before screening became available represent an unquantified but potentially significant segment of the at-risk population because of their likelihood for having received multiple transfusions, according to Henry H. Cagle and his colleagues from the Liver Disease and Hepatitis Program of the Alaska Native Tribal Health Consortium and the Providence Alaska Medical Center, Anchorage (Arch. Pediatr. Adolesc. Med. 2007;161:125-30).

To address this concern, they undertook a lookback program aimed at identifying transfusion recipients and providing them with information about HCV testing. A total of 1,797 patients were identified through a search of records from the NICU at Providence Alaska Medical Center. Of these, 401 were from an integrated, managed care type system at Alaska Native Medical Center (ANMC) and 1,396 were from the private sector.

Letters were mailed to the 277 ANMC patients who could be located and to the 374 private-sector patients for whom contact information was available. The proportion of private-sector patients who could not be located (60%) was significantly higher than that of ANMC patients who could not be found (16%). Among the 151 ANMC patients who responded and underwent HCV testing, 6 (4%) were anti-HCV positive, while among the 64 private-sector patients who responded and were tested, 1 (2%) was positive.

The difference in the researchers’ ability to locate patients from ANMC and from the private sector was related to the fact that for most patients in the integrated system there was a continuous medical record that included information about name changes relating to adoption or marriage, according to the authors. They noted that 51% of the patients or their parents were unaware that the patient had received blood products, possibly because at the time consent was not required. In addition, parents—because of the high degree of parental stress associated with NICU admission—may have simply forgotten.

The investigators concluded that because such a large proportion of patients were unaware of their transfusion history and potential for infection, a history of NICU admission should be considered a risk factor for HCV and that it would be “prudent” for health care professionals to screen any such patients for infection.

In an accompanying editorial, Dr. Maureen M. Jonas of Children’s Hospital, Boston, noted that children and adolescents do not routinely donate blood or have routine blood tests that might reveal liver abnormalities. She noted that identification of infected patients would provide an opportunity for counseling regarding other risk factors such as alcohol consumption and the use of hepatotoxic medications. Younger patients also might be better able to tolerate the demanding treatment regimen, she wrote (Arch. Pediatr. Adolesc. Med. 2007;161:202-3).