HIV-HCV INFECTED AFRICAN AMERICANS

Supplemental Information:

Methods:

When the DC PFAP was created, thirteen community-based programs, academic centers, and hospitals agreed to participate in some or all of the DC PFAP research and operational initiatives. As part of DC PFAP, hepatitis specialty clinics were established in five existing DC centers (“Clinics”) for integrated clinical care and research. The patients included in the study were those in our clinic cohort, which was made up of a series of specialized hepatitis clinics for Washington, DC area patients referred to us and our clinic partners for hepatitis evaluation and treatment.

Liver biopsy results were collected from the facilities where they were performed. Pathologic specimens were not reevaluated for this study and results were collected from the Pathology Department written reports. Results were also evaluated for grade of inflammation and steatosis; any other significant pathology was noted.

Patients were considered to have HIV infection if they were on ART, had a documented positive ELISA and western blot or a detectable HIV VL by standard assay; they were considered to have chronic HCV if they have a positive HCV antibody documented and a positive HCV viral load. Liver biopsy results were collected from the facilities where they were performed. Pathology was not reevaluated for this study and results were collected from the Pathology Department written reports. In this sample, all pathologists reported the METAVIR or Knodell fibrosis staging (0-4) score.[1] Results were also evaluated for grade of inflammation and steatosis; any other significant pathology was noted. All liver biopsies were performed to stage chronic HCV.

Duration of HCV infection was calculated by using the date of chart abstraction minus the date of the first risk factor encounter plus 2 years when the risk factor was drug use. [2, 3] Epidemiologic studies have determined that those who are HCV infected likely became so within 1 – 2 years of using injection drugs and sharing any of the equipment; this equation is not clearly established with sexual transmission.[2, 3] Patient recalled dates of blood transfusions or other
likely sources of HCV infection (needle stick, risky sexual encounter) were used when available, if the patient denied intravenous drug use (IVDU).

Patients with HIV viral loads below the level of detection were recorded as having a viral load of 75 copies/mL, which is the cut-off for the HIV bDNA assay used in the Clinics;[4] patients with HCV viral loads below the level of detection were recorded as having a viral load of 43 IU/mL using the Roche assay used in the Clinics.[5]

Patients with any degree of steatosis on biopsy were recorded as having steatosis. Patients who had ever received a single dose of HCV treatment were recorded as “ever treated”. Patients were considered obese if they had a BMI of 30 or greater. Assumptions relating to alcohol use included that a patient who is a current alcohol user was assumed to also be a past user, and past use was assumed if a patient’s alcohol use was recorded as “past” or “ever”. Light alcohol use was defined as having only sporadic drinks, or having on average no more than one drink each day for women or two drinks each day for men as described elsewhere.[29] Heavy alcohol use was defined by ever binge drinking, ever experiencing withdrawal symptoms, or having on average more than one drink each day for women or two drinks each day for men.[6]

**Paired Biopsies:** Of those with liver biopsies, 23 had a paired biopsy available for comparison (*Figure 1*); 14 (60.9%) were HCV mono-infected and 9 (39.1%) were HIV-HCV co-infected. The mean period of time between liver biopsies was 4.6 ± 1.6 years. A total of 9 (39.1%, 6 mono-infected and 3 co-infected) showed no progression in liver staging at second biopsy. However, 8 patients (34.8%, 4 mono-infected and 4 co-infected) had a one-stage increase. Two-stage progression occurred in 4 patients (17.4%), one of whom was co-infected. These numbers were too small for comparison.
Figure 1: Degree of Change in HCV Mono-Infected and HIV-HCV Co-Infected Patients’ Paired Biopsies
Supplemental Data References