TENOFOVIR LINKED WITH ACUTE KIDNEY INJURY IN HIV-INFECTED PATIENTS

Widely-prescribed first-line HIV drug can cause kidney damage

Highlights
- Acute kidney injury (AKI) associated with tenofovir disoproxil fumarate (TDF) was prevalent among HIV-infected patients and demonstrated a high morbidity rate in a new center-based study.
- More than half of patients with TDF-associated AKI did not recover baseline kidney function during follow-up, and about one-third of the patients required dialysis, according to research that will be presented at ASN Kidney Week 2015 November 3–8 at the San Diego Convention Center in San Diego, CA.

San Diego, CA (November 6, 2015) — Tenofovir (TDF), a widely-prescribed antiretroviral therapy for patients infected with HIV, is associated with acute kidney injury (AKI), according to a new study that will be presented at ASN Kidney Week 2015 November 3–8 at the San Diego Convention Center in San Diego, CA. AKI is a costly, yet preventable, health burden linked to nephrotoxic medications, such as medical imaging dyes and anti-inflammatories, and a common postoperative complication.

Researchers led by Teg Marcos Veiga, MD (Hospital das Clínicas de Pernambuco, Brazil) retrospectively evaluated clinical characteristics and outcomes of AKI associated with the use of TDF in HIV inpatients between March 2011 and February 2015. Among 72 patients, nephrotoxic AKI occurred in 36 cases, 19 of which (26%) were associated with TDF. Of these 19, TDF nephrotoxicity was present in 7 patients without other associated factors.

Even though the drug was withdrawn in all cases, 37% of the patients needed hemodialysis and 58% did not completely recover their kidney function. Four of the patients died due to complications from sepsis, and 1 died from hemorrhagic shock. No patients became dialysis dependent.
“Since Tenofovir is a first-line therapy for HIV, infectious disease specialists and clinicians should be aware of the risk of nephrotoxicity related to its use, especially in the context of other drugs and factors that could increase AKI,” said Veiga.

Figure 1: Photograph of the research team. Courtesy: Hospital das Clínicas de Pernambuco, Brazil.

Study: “Tenofovir Nephrotoxicity is an Important Cause of Acute Kidney Injury in HIV Infected Inpatients” (Abstract FR-PO481)

Disclosures: None.

ASN Kidney Week 2015, the largest nephrology meeting of its kind, will provide a forum for more than 13,000 professionals to discuss the latest findings in kidney health research and engage in educational sessions related to advances in the care of patients with kidney and related disorders. Kidney Week 2015 will take place November 3–8, 2015, in San Diego, CA.