Capsule Commentary on Ogunbayo et al., “Treatment Bias in Management of HIV Patients Admitted for Acute Myocardial Infarction: Does it Still Exist?”

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The national cohort study by Ogunbayo et al.¹ compared the prevalence of revascularization (percutaneous coronary intervention [PCI] or coronary artery bypass graft [CABG]) in patients with acute myocardial infarction (AMI) who were seropositive for human immunodeficiency virus (HIV) to those who weren't. The investigators also tested all-cause inpatient mortality and length of stay in the two groups. The authors extracted admissions (patients) from the National Inpatient Sample database during the years 2010–2014.

How a patient's HIV status affects the standard of care for AMI has always been a matter of scientific debate. In the early 2000s, it was noted that AMI was managed more conservatively, with significantly lower rates of revascularization, in HIV patients than in the general population.² Smilowitz et al. reported, however, an uprising trend of revascularization in HIV patients (42% in 2002 to 63% in 2011; P value < 0.001).³ Ogunbayo et al. emphasized that patients with HIV infection are no longer at a treatment disadvantage, as there was no treatment bias with respect to HIV status noted in terms of revascularization during the years 2010–2014. It is impossible, though, to ascertain from the study of Ogunbayo et al. whether the comparable revascularization rate, regardless of HIV status, represented a higher quality of treatment than in the past.

Despite AMI occurring at a younger age in HIV patients, possibly due to ongoing activation of the immune system and exposure to pro-atherogenic highly active antiretroviral therapy,⁴ incidence of cardiovascular-related deaths in HIV populations is declining (20/100,000 people in 2002 to 16/100,000 people in 2016).⁵ The population-based cohort of Ogunbayo

et al., consisting of the US population during 2010–2014, highlighted the absence of independent association between HIV infection and in-hospital mortality or length of stay, coinciding with existing literature. It is unclear, though, whether the comparable revascularization rate, regardless of HIV status, contributes to the decreased in-hospital mortality, length of stay, and cardiovascular-related deaths in HIV patients, or if this AMI management bias, if persistent, would translate to an appreciable in-hospital mortality difference. Further clinical studies are needed to validate these observations.

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Compliance with Ethical Standards:

Conflict of Interest: The author declares that he does not have a conflict of interest.

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