Editorial
Volume 7:4, 2022

Journal of Infectious Diseases and Medicine

ISSN: 2576-1420 Open Access

HIV Treatment with Post-exposure Prophylaxis

George Marck*

Department of Medicine, Stanford University, CA, USA

Editorial

Post-exposure prophylaxis, also known as post-exposure prevention (PEP), is any preventive medical treatment started after exposure to a pathogen in order to prevent the infection from occurring [1,2]. PEP, or post-exposure prophylaxis, is a short course of HIV medicines taken very soon after a possible exposure to HIV to prevent the virus from taking hold in your body [3,4]. You must start it within 72 hours (3 days) after a possible exposure to HIV, or it won't work. Every hour counts! PEP should be used only in emergency situations. It is not meant for regular use by people who may be exposed to HIV frequently [5].

Post-exposure prophylaxis to prevent HIV infection

Key facts:

- Globally, there were an estimated 35 million people living with HIV, of whom 13 million were on Antiretroviral Treatment (ART) at the end of 2013.
- People can be accidentally exposed to HIV though healthcare work or due to exposures outside healthcare setting, for example, through unprotected sex or sexual assault.
- Antiretrovirals (ARVs) have been used to prevent infection in case of accidental exposures for many years. This intervention is called post-exposure prophylaxis (PEP) and involves taking a 28-day course of ARVs.
- PEP should be offered, and initiated as early as possible, for all individuals with an exposure that has the potential for HIV transmission, and ideally within 72 hours.
- If started soon after exposure, PEP can reduce the risk of HIV infection by over 80%. Adherence to a full 28-day course of ARVs is critical to the effectiveness of the intervention.
- Recent evidence shows PEP uptake has been insufficient: only 57% of the people who initiated PEP have completed the full course and rates were even lower at 40% for victims of sexual assault.

Guidelines needed: For many people that are accidentally exposed to HIV, PEP provides a single opportunity to prevent HIV after exposure. Such accidental exposures may be among health care workers who had needle stick injuries or among adults and children who survived sexual violence.

Access to timely PEP remains challenging in many settings in particular for non-health worker exposures. Recent studies highlight the need to simplify approaches and improve the use of HIV PEP. Reported issues include, missed opportunities to provide PEP following sexual exposure in the United Kingdom, lack of PEP protocols and limited compliance to guidance in China, Nigeria and UK, limited access to PEP by female sex workers in Kenya and health workers in Uganda, and structural stigma that reduces PEP uptake among men who have sex with men in the United States of America.

WHO response: In December 2014, WHO releases an update which includes a new set of recommendations for PEP. This update is the second supplement of the WHO consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection, released in June 2013.

New WHO guidelines aim to simplify PEP prescribing and improve adherence and completion rates by recommending better tolerated drugs. Recommendations for PEP are also aligned with recommendations for ART as a way to simplify procurement and improve access.

For the first time, the PEP recommendations cover all types of exposures, and in all population groups, including adults, adolescents and children. Traditionally, separate WHO and national guidelines have been developed for PEP according to exposure type (occupational or non-occupational) and populations (adults or children).

Key recommendations

The recommended PEP regimens are: For adults: Tenofovir combined with either lamivudine (3TC) or emtricitabine (FTC) as preferred backbone drugs and these are also the preferred drugs for treating HIV. The recommended third drug is ritonavir-boosted lopinavir (LPV/r), which is also recommended by WHO as a preferred drug for HIV treatment.

For children: Zidovidune (AZT) and lamivudine (3TC) backbone drugs for children aged 10 or below, with ritonavir-boosted lopinavir (LPV/r) recommended as the third drug choice. This is also in alignment with preferred drugs for treating HIV in children.

Acknowledgement

None.

Conflict of Interests

None.

References

1. Balar, Arjun V., Matthew D. Galsky, Jonathan E. Rosenberg and Thomas Powles, et al. "Atezolizumab as first-line treatment in cisplatin-ineligible patients with locally advanced and metastatic urothelial carcinoma: A single-arm, multicentre, phase 2 trial." *Lancet* 389 (2017): 67-76.
2. Barber, Daniel L., E. John Wherry, David Masopust and Baogong Zhu, et al. "Restoring function in exhausted CD8 T cells during chronic viral infection." *Nat* 439 (2006): 682-687.
3. Bargou, Ralf, Eugen Leo, Gerhard Zugmaier and Matthias Klinger, et al. "Tumor regression in cancer patients by very low doses of a T cell–engaging antibody." *Sci* 321 (2008): 974-977.
4. Baron, Ellen and Satwant Narula. "From cloning to a commercial realization: human alpha interferon." *Crit Rev Biotechnol* 10 (1990): 179-190.
5. Barth, Stefan. "Editorial [Hot topic: Recombinant immunotoxins-The next generation (Executive Editor: Stefan Barth)]." *Curr Pharm Des* 15 (2009): 2650-2651.

***Address for Correspondence:** George Marck, Department of Medicine, Stanford University, CA, USA, E-mail: marckg53@yahoo.com*

***Copyright:** © 2022 Marck G. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.*

Received: 07 April, 2022, Manuscript No. jidm-22-66728; **Editor assigned:** 12 April, 2022, PreQC No. P-66728, **Reviewed:** 15 April, 2022, QC No. Q-66728; **Revised:** 21 April, 2022, Manuscript No. R-66728, **Published:** 29 April, 2022, DOI: 10.37421/2576-1420.2022.7.233

How to cite this article: Marck, George. "HIV Treatment with Post-exposure Prophylaxis." J Infect Dis Med 7 (2022): 233.