EClinicalMedicine 6 (2018) 5–6

Contents lists available at ScienceDirect

EClinicalMedicine

journal homepage: https://www.journals.elsevier.com/eclinicalmedicine

EClinicalMedicine
Published by THE LANCET

Commentary

Patient-centered Care and Treatment in HIV Infection

Massimiliano Lanzafame[a], Sandro Vento[b,c,*]

[a] Diagnosis and Therapy of HIV Infection Unit, G.B. Rossi University Hospital, Verona, Italy
[b] Department of Medicine, School of Medicine, Nazarbayev University, Astana, Kazakhstan
[c] University Medical Center, Astana, Kazakhstan

ARTICLE INFO

Article history:
Received 11 December 2018
Accepted 4 January 2019
Available online xxxx

In this issue of *EclinicalMedicine*, Diaco and colleagues describe a retrospective, secondary analysis of routinely collected data of 103 patients followed by two infectious diseases specialists in the HIV out-patient clinic of the University Department of Medicine and Infectious Diseases Service, Kantonsspital Baselland, Basel, Switzerland. They found that 70 patients were de-escalated to either dolutegravir/emtricitabine or dolutegravir/lamivudine by stopping tenofovir disoproxil fumarate or abacavir [1]. Viremia remained undetectable in all de-escalated patients at least 48 weeks later. These results confirm those of eight previous, heterogeneous studies in experienced patients on dolutegravir plus lamivudine [reviewed in [2]], which showed a low risk of virologic failure (6 of 727 patients, without emergence of specific resistance mutations) and a high tolerability (only 18 patients interrupted the treatment due to side effects). Although Diaco and colleagues included emtricitabine much more often than lamivudine in their regimen, they acknowledge that the two drugs are interchangeable; lamivudine is available as a low cost generic and a fixed-dose lamivudine-dolutegravir combination is more likely to be available in the future.

Diaco's and colleagues' study is yet another example that the once quite neglected issue of patient-centered medicine in HIV care is finally becoming important and that tailoring of therapy and individual patients' preferences must be taken into strong account. Indeed following patients' preferences is central to the important issue of adherence to treatment, so vital in HIV therapy. The aging HIV-infected population (in 2020, around 50% of infected individuals will be 50 years of age or above in high income countries) [3] suffers from a number of non-communicable diseases, and HIV-infected people are not immune from the epidemic of non-communicable diseases that affects sub-Saharan Africa [4]. Comorbidities imply the use of several drugs with potential interactions and therefore deintensification, i.e. reduction of number of anti-HIV drugs, is an option that will be increasingly adopted in the future and is particularly attractive in those patients who have achieved good control of HIV replication following the initial use of a three-drug regimen. The dual dolutegravir plus lamivudine or emtricitabine regimen combines a drug with high antiviral potency, long half-life, high genetic barrier to resistance and tolerability (dolutegravir) with one with a good tolerability (lamivudine or emtricitabine). In addition, interactions with other drugs are limited, and dual therapy with dolutegravir and lamivudine does not appear to increase genital shedding of HIV-1 [5], hence should not increase the risk of sexual transmission of the virus. The concern regarding the reduced "forgiveness" (i.e., the possibility that viral replication increases) should patients be not fully adherent was highly mitigated in Diaco's patients by the fact that they were followed for many years by the same physician, who had established a very good relationship with them and whom they trusted. This is yet again another extremely important aspect of patient-centered care in HIV infection; patients need to be familiar with their physicians to be able, among other aspects, to openly let them know whether they adhere to treatment, and how much so. We have demonstrated the value of this aspect of care in previous publications [6,7].

Dolutegravir monotherapy was not considered due to a high risk of virological failure but Diaco and colleagues think that it "may still emerge as a valid de-escalation option in selected patients in the future" [1]. Indeed, in a recent report only three cases (4.8%) of virologic failure (all prior to 24 weeks of treatment) were observed in a median follow-up time of eighteen months in 63 patients on dolutegravir monotherapy, [8] and we have shown that this option could be pursued in highly adherent patients with a zenith HIV-RNA below 100,000 copies/ml [7].

In conclusion, the study from Diaco and colleagues confirms once again the virologic safety and feasibility of a dual regimen including dolutegravir. The results of the ongoing TANGO study (Switch study to evaluate Dolutegravir plus Lamivudine in virologically suppressed human immunodeficiency virus type 1 positive adults), a phase III, randomized, open-label, active-controlled, multicenter, parallel-group study that started enrolling patients in 2018 [9] will obviously be more relevant and should finally show whether indeed this regimen can become the preferred option for deintensification therapy in non-hepatitis B virus coinfected patients. Additional investigations are also needed to identify the factors predicting success of other deintensification strategies and further improve patient-centered anti-HIV therapy.

DOI of original article: https://doi.org/10.1016/j.eclinm.2018.11.005.
* Corresponding author at: Dept. of Medicine, School of Medicine, Nazarbayev University, 5/1 Kerey and Zhanibek Khans Str., 010000 Astana, Kazakhstan.
E-mail address: sandro.vento@nu.edu.kz (S. Vento).

https://doi.org/10.1016/j.eclinm.2019.01.001

Author Contributions

Massimiliano Lanzafame wrote the Commentary and Sandro Vento modified/amended it.

Declaration of Interests

No conflicts for either author.

References

[1] Diaco ND, Strickler C, Giezendanner S, Wirz SA, Tarr PE. Systematic de-escalation of successful triple antiretroviral therapy to dual therapy with dolutegravir plus emtricitabine or lamivudine in Swiss HIV-positive persons. EClinicalMedicine 2019. https://doi.org/10.1016/j.eclinm.2018.11.005.
[2] Comi L, Di Filippo E, Maggiolo F. Dolutegravir plus lamivudine as simplification dual therapy in virologically suppressed HIV-1 infected subjects. J Immunol Sci 2018;2(1):60–4.
[3] Smit M, Brinkman K, Geerlings S, et al. Future challenges for clinical care of an ageing population infected with HIV: a modelling study. Lancet Infect Dis 2015;15(7):810–8.
[4] de-Graft Aikins A, Unwin N, Agyemang C, Allotey P, Campbell C, Arhinful D. Tackling Africa's chronic disease burden: from the local to the global. Glob Health 2010;6:5.
[5] Gianella S, Marconi VC, Berzins B, et al. Genital HIV-1 shedding with Dolutegravir (DTG) plus Lamivudine (3TC) dual therapy. J Acquir Immune Defic Syndr 2018 Dec 15;79(5):e112–4.
[6] Vento S, Lanzafame M, Lattuada E, Cainelli F. Limited adherence to antiretroviral regimens in an Italian Cohort: a long-term follow-up. J Acquir Immune Defic Syndr 2013;62(3):e103.
[7] Lanzafame M, Rizzardo S, Piacentini D, Lattuada E, Chiesi S, Vento S. Dolutegravir monotherapy: an option for highly adherent HIV1-infected naive patients with relatively low zenith HIV-RNA? Infect Dis (Lond) 2018 Oct;14:1–2 [Epublished ahead of print].
[8] Tebano G, Schneider L, Soulié C, et al. Long-term follow-up of dolutegravir as a single antiretroviral agent in patients with suppressed HIV viraemia. J Int AIDS Soc 2018;21(S8):e25187.
[9] Switch study to evaluate dolutegravir plus lamivudine in virologically suppressed human immunodeficiency virus type 1 positive adults (TANGO). https://clinicaltrials.gov/ct2/show/NCT03446573, Accessed date: 11 December 2018.