HEMATOLOGY, TRANSFUSION AND CELL THERAPY

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Scientific Comment

Comment to: Test seeking: are health care professionals referring people to the blood centers for infectious markers testing?☆

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The main finding of the article of Moreno and collaborators[1] published in this issue of *Hematology, Transfusion and Cell Therapy*, is astonishing: health care professionals, mainly medical doctors, advised at-risk and HIV infected subjects to try to donate blood in order to get tested for HIV and hepatitis viruses.

Test seeking at blood centers is well known to occur in Brazil[2] and elsewhere.[3] Based on specific questions additional to the regular predonation questionnaire, the same research group estimated that overall 8.8% of donors in a large Brazilian blood center[2] were test seekers corroborated by the finding of 8.1% on a second survey conducted in three large blood centers.[4] These studies disclosed reasons leading such individuals to seek for testing through blood donations: easy access, fast results, reliability of the blood bank and its testing system are the main factors pointed by test seekers. An important proportion of test seekers does not recognize the risk presented by their blood donation, specially after risky behaviors.[4,5] Part of this group is simply not aware of the risk of HIV transmission in the window period, while another portion is informed, but seems to trust that, if they are HIV infected the blood bank will surely detect it and avoid transmission. Such misinformation is the focus of many efforts aiming to bring to the general population and blood donation candidates the message that blood banks are not the proper site to be HIV tested.

While unawareness of basic facts about HIV and other blood transmissible agents by the lay public is understandable, it comes as a surprise that health professionals may incur into the same mistakes. The study on the spotlight was the first to document a role of medical professionals in stimulating such test seeking behavior at blood centers.

Though disturbing, it is important to notice that "medically-induced" test seeking corresponded to a small fraction of the deferred donors studied, 468 out of 4.013 (11.8%) donors deferred due to higher risk behaviors reported having donated to be tested upon a health professional suggestion. Perhaps more worrisome, 43 out of 341 HIV+ donors visited the blood bank to be tested upon a healthcare professional referral, 29 of those by medical doctors! Why a medical doctor would advise an HIV+ patient, or a patient that acknowledge a high risk for a recent HIV infection to donate blood? The study goes further in elucidating this puzzle by presenting data that indicates the main reason is to get tested for hepatitis viruses. In this aspect, such referring physicians and other healthcare providers are adequately indicating hepatitis B and C viruses testing for their patients, as these are common co-infections in HIV patients, but largely ignoring the risk such referral poses to blood recipients. So, it gets clear through this dataset that more education on specific aspects of viral biology related to the risk for their transfusion transmission is greatly needed.

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☆ See paper by Moreno et al. on pages [229–235].
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Such education for healthcare providers and blood donor candidates becomes more urgent in the face of the now widespread and increasing use of HIV pre-exposure prophylaxis (PreP).[6] It is recognized that PreP promotes abnormal and delayed seroconversions which may have an obvious significant impact to blood screening.[7] Moreover, donors harboring HIV antibodies and concomitant very low HIV viral load, were depicted worldwide after sensitive nucleic acid testing was introduced for blood screening. These donors were denominated "elite controllers", under the view that they would represent a subset of infected persons able to naturally suppress viral replication.[8] However, recently, 66% of them were found, in South Africa, to carry antiretroviral drugs in the plasma.[9] In conclusion, it is very important to educate the medical staff in charge of HIV patients and at-risk individuals, underscoring the associated risk posed by a blood donation from an HIV infected person to the wellness of recipients.

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