

THE IMPORTANCE OF RAPID HIV TESTS AND RECOMMENDATIONS FOR MANAGING THEIR RESULTS

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Abstract: The main strategy for the reduction of late diagnosis of HIV infection is the promotion of HIV testing. Rapid HIV testing, including self-diagnostic tests, are tools to facilitate the testing of the individuals who are most vulnerable to HIV infection. A positive result given by these tests must always be confirmed at the primary care centre. This article discusses the implications of rapid test results, suggests what information should be provided to individuals who take a rapid test, and serves as a reminder of how to deal with accidental exposure to HIV.

Keywords: HIV, AIDS, late diagnosis, rapid HIV tests, primary care.

IMPORTANCIA DE LAS PRUEBAS RÁPIDAS DE VIH Y RECOMENDACIONES EN EL MANEJO DE SUS RESULTADOS

Resumen. La principal estrategia para reducir el diagnóstico tardío de la infección por VIH es la promoción de la prueba del VIH. Las pruebas rápidas de VIH, incluidos los test de autodiagnóstico, son instrumentos para facilitar la realización de la prueba en las personas más vulnerables a esta infección. Un resultado positivo de estas pruebas requiere siempre de su confirmación en la consulta de Atención Primaria. En este artículo se recogen las implicaciones de los resultados de las pruebas rápidas, una propuesta de información que se puede proporcionar a la persona que se ha hecho una prueba rápida y recuerda cómo actuar ante una exposición accidental al VIH.

Palabras clave: VIH, sida, diagnóstico tardío, pruebas rápidas de VIH, atención primaria.

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IMPORTÂNCIA DOS TESTES RÁPIDOS DE VIH E RECOMENDAÇÕES PARA A GESTÃO DOS SEUS RESULTADOS

Resumo: A principal estratégia para reduzir o diagnóstico tardio da infeção pelo VIH é a promoção do teste de VIH. Os testes rápidos de VIH, incluindo testes de autodiagnóstico, são instrumentos para facilitar a realização do teste nas pessoas mais vulneráveis a esta infeção. Um resultado positivo nestes testes requer sempre a confirmação dos mesmos por parte dos Cuidados Primários. Este artigo reúne as implicações dos resultados dos testes rápidos, uma proposta de informação que pode ser facultada à pessoa que fez um teste rápido e lembra como agir em caso de exposição acidental ao VIH.

Palavras-chave: VIH, sida, diagnóstico tardio, testes rápidos de VIH, cuidados primários.

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LATE DIAGNOSIS OF HIV INFECTION

Infection with the human immunodeficiency virus (HIV) causes significant morbidity rates, reduced life expectancy, an elevated number of deaths per year, and high healthcare costs (European Centre for Disease Prevention and Control, 2019) .

Women, the elderly, individuals infected through heterosexual intercourse or drug injection, and immigrants from Southeast Asia and sub-Saharan Africa are the individuals who are most likely to receive late diagnosis (European Centre for Disease Prevention and Control, 2018).

Global strategy to reduce late diagnosis

The main strategy to reduce late diagnosis is the promotion of HIV testing. In this regard, UNAIDS calls for a commitment on the part of the international community to expand HIV testing (ONUSIDA, 2018).

To celebrate the European Testing Week (23-30 November 2018), the ECDC published a guide on the offer of integrated testing for HIV, Hepatitis B Virus (HBV), and Hepatitis C Virus (HCV). The aim of this strategy is to prevent these infections from posing a public health threat by 2030, as described in the Sustainable Development Goals.

Individuals who should be offered integrated testing are the following: men who have sex with men (MSM); transgender individuals; individuals who inject drugs; sexual partners or injection partners of individuals diagnosed with HIV, HBV, and HCV; immigrants from high-prevalence countries; those living with HBV-infected individuals; the homeless; individuals engaged in prostitution; prisoners; pregnant women; haemodialysis patients; individuals who have received blood products or organs or who have been operated on before adequate safety and quality regulations were in place (ECDC, 2018).

RAPID HIV TESTING

Rapid HIV testing programmes have many advantages. As a result, they have been recommended by various international agencies to reduce late diagnosis (OMS, 2019; ONUSIDA, 2018).

Rapid HIV tests are screening tests based on enzyme immunoassay techniques, with rapid (20-minute) and subjective readings, in which negative results are highly reliable (have a high negative predictive value), whereas positive results always need to be confirmed using diagnostic testing (Ministerio de Sanidad Consumo y Bienestar Social y Colegio General de Colegios Oficiales de Farmacéuticos, 2017).

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HIV self-tests are a type of rapid test kits sold in pharmacies. Although they are called self-tests, this does not mean that the test is capable of actually diagnosing HIV infection, but rather that the individual undergoing the test is also performing the test. A positive self-test result always needs to be confirmed using a more specific HIV test, just like any rapid test (Ministerio de Sanidad Consumo y Bienestar Social y Colegio General de Colegios Oficiales de Farmacéuticos, 2017).

Method of use

Rapid HIV tests are single-use and can test blood, plasma, or oral fluid samples. It is important to strictly adhere to the instructions for the use of these tests, as the way they are carried out differs from one to another. These test kits should be kept at room temperature (between 18 and 30 degrees Celsius). Fasting is not required and no evidence of drug interaction has been shown (Ministerio de Sanidad Consumo y Bienestar Social y Colegio General de Colegios Oficiales de Farmacéuticos, 2017).

Who is the target group for rapid HIV testing?

Rapid testing is generally used in community settings to facilitate access to HIV testing for individuals who are most vulnerable to HIV infection.

Rapid HIV testing targets people in groups with a prevalence of HIV infection above 1%, because, otherwise, the likelihood of a false positive result increases (i.e. the test being positive without there being any antibodies to HIV in the sample).

ASSISTING AN INDIVIDUAL WHO HAS TAKEN A RAPID HIV TEST

When assisting an individual who has taken a rapid HIV test, it is necessary to clarify some concepts, one of which is “rapid testing”. These tests are called “rapid” because they provide a result in 20-30 minutes, not because they detect infection shortly after the transmission has occurred. If the individual has been accidentally exposed to HIV in the past 72 hours, they should be referred to a hospital emergency department where the possibility of administering post-exposure prophylaxis will be considered.

Another important concept is the “window period”. This is the period of time between HIV transmission and the point where the test is able to detect infection. In the case of rapid testing, this period lasts 3 months.

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Interpretation of rapid test results

Negative result

A negative result indicates that the test has detected no antibodies to HIV. In the absence of risk behaviours in the past 3 months, a negative result rules out infection.

If risky behaviours have taken place, the test does not rule out infection and should therefore be repeated three months after the last risky practice. Until then, condoms should always be used in sexual relations.

If the individual injects drugs, it is important to remind them that sharing drug injection equipment is a practice with a very high probability of transmitting HIV and other viruses, such as HBV and HCV (Ministerio de Sanidad Consumo y Bienestar Social y Colegio General de Colegios Oficiales de Farmacéuticos, 2017).

Inconclusive result

An inconclusive result must always be confirmed (Ministerio de Sanidad, Consumo y Bienestar Social y Colegio General de Colegios Oficiales de Farmacéuticos, 2017). To do so, an HIV test should be conducted in a laboratory.

Positive result

A positive result is always a provisional result. It is important to remember that rapid HIV tests are screening tests, not diagnostic tests. Therefore, positive results need to be confirmed by conducting HIV tests in the laboratory (Ministerio de Sanidad Consumo y Bienestar Social y Colegio General de Colegios Oficiales de Farmacéuticos, 2017).

The service users should then be reminded of the importance of always using a condom during sex and, if applicable, not sharing drug injection equipment, until the test results are confirmed.

Information for the individual who took the test

The consultation for a rapid test result is an opportunity for individuals to explore and understand confidentially their risks of becoming infected with HIV and to learn the results of their HIV tests (ONUSIDA, 2018). If the individual is at risk or has continued to engage in risky practices, HIV testing should be offered according to current recommendations (Ministerio de Sanidad Consumo y Bienestar Social, 2014).

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For those who engage in risky practices, UNAIDS recommends reinforcing testing by pointing out the benefits of knowing one's serostatus (Adaptado de (ONUSIDA, 2018)):

- Undiagnosed infected people may benefit from antiretroviral treatment.
- The sooner the diagnosis is established, the sooner treatment can begin and the better the prognosis.
- Knowing one's serostatus facilitates access to prevention options to keep that individual and their loved ones free of HIV.
- Effective antiretroviral treatment is a great prevention tool, since an individual with an undetectable viral load has only a negligible risk of transmitting HIV.
- A woman infected with HIV can access medical treatment and follow-up to prevent transmission of the virus to her baby.
- By deciding to get tested, vulnerable individuals may become more engaged with the healthcare system.
- Getting tested for HIV is an opportunity to detect other diseases such as hepatitis or tuberculosis. It saves both money and lives.

Acting on accidental exposure to HIV

Non-occupational post-exposure prophylaxis (nPEP) for HIV is a prevention measure that is intended to avoid becoming infected with HIV after accidental exposure to HIV outside of the healthcare setting through sexual or parenteral routes (Ministerio de Sanidad Consumo y Bienestar Social, 2019).

If the individual has been exposed to a risk situation in the past 72 hours, they should be referred to a hospital emergency department to assess the appropriateness of initiating nPEP. It is recommended that the treatment be started within 6 hours after the incident, since the effectiveness of the treatment decreases with the passage of time. The nPEP regimen lasts about 28 days and requires medical follow-up (Ministerio de Sanidad Consumo y Bienestar Social, 2019).

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