Disponible en ligne sur
ScienceDirect
www.sciencedirect.com

Elsevier Masson France
EM|consulte
www.em-consulte.com

Médecine et maladies infectieuses

Médecine et maladies infectieuses xxx (2017) xxx–xxx

Original article

DEPIVIH 2: Use of three HIV testing methods in French primary care settings – ELISA laboratory screening versus two rapid point-of-care HIV tests☆

DEPIVIH 2 : étude observationnelle comparative de trois méthodes de dépistage de l'infection au VIH par des médecins généralistes en France

D. Papadima[a,b,*], R. Gauthier[b,c,d], F. Prévoteau du Clary[b,e], S. Bouée[b,f], G. Conort[b,g], J.-M. Livrozet[b,h], O. Taulera[b,i], A. Wajsbrot[b,j], C. Majerholc[b,c,d,k], J.-M. Peter[b,l], J.-P. Aubert[b,c,d]

[a] *Département de médecine générale, université Louis-Pasteur, 4, rue Kirschleger, 67000 Strasbourg, France*
[b] *Groupe d'études et recherché ville-hôpital, 75, rue du Ruisseau, 75018 Paris, France*
[c] *Departement médecine générale, université Paris-Diderot, Sorbonne Paris Cité, 75018 Paris, France*
[d] *EA recherche clinique coordonnée ville-hôpital, méthodologies et société (REMES), 75018 Paris, France*
[e] *Cité de la santé, hôpitaux de Toulouse, 31059 cedex 9 Toulouse, France*
[f] *Cemka Eval, 43, boulevard du Maréchal-Joffre, 92340 Bourg-la-Reine, France*
[g] *Département de médecine générale, université de Bordeaux, 33076 Bordeaux cedex, France*
[h] *Service des maladies infectieuses et tropicales, hôpital Édouard-Herriot, 69003 Lyon, France*
[i] *Hôpital Saint-Louis, 75010 Paris, France*
[j] *Médecine générale, hôpital d'Avignon, 84000 Avignon, France*
[k] *Service de médecine interne, hôpital Foch, 92150 Suresnes, France*
[l] *Groupe hospitalier Émile-Muller, 68100 Mulhouse, France*

Received 20 September 2016; received in revised form 15 January 2017; accepted 14 November 2017

Abstract

Objective. – The primary endpoint was to evaluate the use of HIV testing methods by French primary care providers: Elisa laboratory screening, instant result HIV diagnostic test and rapid result HIV diagnostic test. The secondary endpoints were the population screening rate of unknown HIV status consulting during the study period, reasons for screening and for choosing the specific screening method, the investigators' satisfaction with the rapid diagnostic test (RDT) and problems encountered.

Patients and methods. – National prospective interventional study with French family physicians (FP) from December 2013 to December 2014. FPs enrolled all consenting adults consulting for an HIV screening test during a 6-month period: the choice was an Elisa laboratory test or one of the two RDTs.

Results. – During the study period, 43 FPs included 981 patients. HIV screening was performed for the first time for 31.6% of patients; 767 (78.2%) Elisa laboratory test prescriptions and 214 (21.8%) RDTs were performed, leading to a screening rate of 1.3%. For 120 (15.7%) of the Elisa laboratory tests, the result was not reported and six RDTs were not valid. Nine patients were diagnosed as HIV-infected (0.9%): five with Elisa laboratory test and four with RDT. Almost 90% of FPs were willing to keep on using RDTs in their daily practice.

☆ The DEPIVIH 2 study has been presented at three congresses: 15th Congress of the European AIDS Clinical Society, October 2015, Barcelona – poster, 16th Congress of the French AIDS society (French acronym SFLS), October 2015, Nantes – poster, 15th Congress of the French National College of Teachers in General Practice, November 2015, Dijon – oral communication.

* Corresponding author at: Département de médecine générale, université Louis-Pasteur, 4, rue Kirschleger, 67000 Strasbourg, France.
E-mail address: daianapapadima@gmail.com (D. Papadima).

https://doi.org/10.1016/j.medmal.2017.11.005

Please cite this article in press as: Papadima D, et al. DEPIVIH 2: Use of three HIV testing methods in French primary care settings – ELISA laboratory screening versus two rapid point-of-care HIV tests. Med Mal Infect (2017), https://doi.org/10.1016/j.medmal.2017.11.005

Conclusion. – In general practice, RDTs may be an important additional tool to traditional HIV screening. They could account for one in five tests prescribed in this context.

Keywords: Screening; HIV RDT; HIV infection

Résumé

Objectifs. – Évaluer l'utilisation de trois méthodes de dépistage du VIH en soins primaires : sérologie VIH au laboratoire, test rapide d'orientation diagnostique (TROD) à réponse immédiate et TROD à réponse rapide. Les objectifs secondaires étaient le taux de dépistage de la population vue en consultation, les motifs de réalisation du test de dépistage, les motifs du choix de la méthode utilisée, la satisfaction du médecin vis-à-vis du test et les éventuels problèmes rencontrés.

Patients et méthodes. – Étude observationnelle prospective et multicentrique sur l'utilisation des TROD et de la sérologie du VIH en pratique courante de dépistage par des médecins généralistes. Les médecins devaient inclure pendant 6 mois des adultes à qui ils réalisaient un test de dépistage (le choix étant entre l'un des TROD et une sérologie).

Résultats. – Quarante-trois investigateurs ont inclus 981 patients (décembre 2013–décembre 2014). Le dépistage n'avait jamais été fait pour 31,6 % des patients. Ont été réalisés 767 sérologies (78,2 %) et 214 TROD (21,8 %). La proportion de patients ayant été dépistés est de 1,3 % ; 120 sérologies (15,7 %) n'ont pas été récupérées et 6 TROD étaient invalides. Neuf patients ont été découverts séropositifs (0,9 %), cinq par sérologie et quatre par TROD. Environ 90 % des médecins ont déclaré souhaiter continuer à utiliser les TROD en dépistage dans leur pratique quotidienne.

Conclusion. – En médecine générale, les TROD peuvent être un outil complémentaire au dépistage classique du VIH, pouvant représenter jusqu'à 1 test de dépistage sur 5 réalisés dans ce contexte.

Mots clés : Dépistage ; TROD VIH ; Infection par le VIH

1. Introduction

The 2009 French guidelines on human immunodeficiency virus (HIV) screening recommended routine screening for all individuals consulting at a healthcare facility and repeated targeted screening for at-risk populations [1–3]. However, over the next two years, only a 5% increase in the number of screening tests performed was observed and the figure then stabilized [4]. A retrospective study performed in 2012 reported a poor detection of clinical signs of early HIV infection and of at-risk groups [5]. Several groups of experts recommended "regular targeted screening". They argued that such screening should be suggested as often as possible to patients [4,6].

The 2009 guidelines recommended using another tool to complement traditional screening: the HIV rapid diagnostic test (RDT) [7]. The HIV RDT simultaneously allows for pretesting advice, actual testing and instant result delivery, and customized counselling. The number of tests that are not performed or whose results are not collected by patients and for which physicians do not have any feedback is thus reduced. Since the implementation of these testing methods in France, several studies have evaluated the use of RDTs in emergency departments [8,9], free and anonymous screening centers (French acronym CDAG) [10], community settings and awareness activity [11,12]. Two exploratory studies conducted in metropolitan France in primary care settings identified several limitations to these tests such as technical difficulties for blood sampling and time required to perform the test for some of the RDTs. They, however, concluded to the good acceptability of this type of screening method [13,14]. A total of 150,000 RDTs have been performed between 2012 and 2014 [15].

However in 2014, RDTs were still not reimbursed when used in primary care settings and the traditional screening method were still based on ELISA serology performed by medical laboratories.

No study assessed the utility of RDTs in the current HIV screening process in French primary care settings. We performed a study to compare three screening methods used in primary care settings: two RDTs versus ELISA serology.

2. Material and method

The DEPIVIH 2 study was initiated and coordinated by the Study and Research Group in Community and Hospital Settings (French acronym GERVIH).

This observational, prospective and multicenter study was performed in five French regions in primary care settings and aimed to compare the use of three HIV screening methods:

- prescription of HIV serology performed by a medical laboratory;
- use of a rapid result RDT (within 30 minutes): VIKIA® BioMérieux;
- use of an instant result RDT (< 3 minutes): INSTI® Nephrotek.

French family physicians working in private practices or employed in healthcare facilities were invited to participate in the study. Each of the 43 physician investigators who had been trained beforehand to perform and interpret RDTs included at least one patient.

Please cite this article in press as: Papadima D, et al. DEPIVIH 2: Use of three HIV testing methods in French primary care settings – ELISA laboratory screening versus two rapid point-of-care HIV tests. Med Mal Infect (2017), https://doi.org/10.1016/j.medmal.2017.11.005