



Susceptibilities to co-trimoxazole of pathogens isolated from blood and stool specimens in Abidjan, Ivory Coast, 1994 to 1996.

Xavier Anglaret, Fatoumata Sylla-Koko, Dominique Bonard, Patrice Combe, Makan Coulibaly, Eba Aoussi, François Dabis

► To cite this version:

Xavier Anglaret, Fatoumata Sylla-Koko, Dominique Bonard, Patrice Combe, Makan Coulibaly, et al.. Susceptibilities to co-trimoxazole of pathogens isolated from blood and stool specimens in Abidjan, Ivory Coast, 1994 to 1996.. *Journal of Clinical Microbiology*, 1997, 35 (7), pp.1915. inserm-00263553

HAL Id: inserm-00263553

<https://inserm.hal.science/inserm-00263553>

Submitted on 12 Mar 2008

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Letters to the Editor

Susceptibilities to Co-Trimoxazole of Pathogens Isolated from Blood and Stool Specimens in Abidjan, Ivory Coast, 1994 to 1996

Prophylaxis of opportunistic infections with co-trimoxazole (CMX) is now being discussed in various African settings where human immunodeficiency virus (HIV) is highly prevalent (4). Bacterial septicemia and diarrhea are frequently diagnosed in African HIV-infected patients (2, 5). We reviewed the susceptibilities to CMX of bacteria isolated from blood and stool specimens in a reference hospital in Abidjan, Ivory Coast, from 1994 to 1996.

The Centre Hospitalier de Treichville (CHT) is one of the three university hospitals of Abidjan. In 1995, more than 70% of inpatients from the Infectious Disease department of the CHT were HIV infected (3). Using records of the microbiology laboratory, we identified all bacterial isolates obtained from adult inpatients at the CHT from January 1994 to December 1996. Pathogens were cultured and then identified biochemically according to standard reference methods. Antimicrobial susceptibility of pathogens was determined by disk diffusion (1).

During this period, 478 strains were isolated from blood and 101 strains were isolated from stool specimens, of 3,964 and 2,024 specimens processed, respectively. A total of 78% of positive blood specimens and 86% of positive stool specimens originated from the Infectious Disease department of the CHT. Non-*Salmonella typhi* *Salmonella* strains accounted for 52% of the isolated pathogens. As shown in Table 1, almost

two-thirds of the total number of strains tested were sensitive to CMX. Most of the *Salmonella* strains, but only 23% of *Shigella* strains, were CMX sensitive.

When used in prevention of protozoal infections, CMX could also prevent some bacterial diseases in African HIV-infected patients. Non-*S. typhi* *Salmonella* is known to be the most frequent cause of bacterial septicemia and diarrhea in such patients (2, 5). In Abidjan, unlike in other African settings, non-*S. typhi* *Salmonella* strains remain largely sensitive to CMX. The prophylactic use of CMX among HIV-infected patients is currently being evaluated in The Ivory Coast (ANRS 059 trial), while drug resistance is being closely monitored.

We thank Allangba Yao, Aguiya Ahoua, Coulibaly Nambate, Michèle Müller, and Keita Alimatou (CeDReS). Special thanks to Pierre Smets (CeDReS) and Auguste Kadio (CHU de Treichville).

REFERENCES

1. Barry, A. L., and C. Thornsberry. 1991. Susceptibility tests: diffusion test procedures, p. 1117–1125. In A. Balows, W. J. Hausler, Jr., K. L. Herrmann, H. D. Isenberg, and H. J. Shadomy (ed.), *Manual of clinical microbiology*, 5th ed. American Society for Microbiology, Washington, D.C.
2. Clerinx, J., J. Bogaerts, H. Taelman, et al. 1995. Chronic diarrhea among adults in Kigali, Rwanda: association with bacterial enteropathogens, rectocolonic inflammation, and human immunodeficiency virus infection. *Clin. Infect. Dis.* **21**:1282–1284.
3. Djomand, G., A. E. Greenberg, M. Sassan-Morokro, et al. 1995. The epidemic of HIV/AIDS in Abidjan, Côte d'Ivoire: a review of data collected by the project RETRO-CI from 1987 to 1993. *J. Acquired Immune Defic. Syndr.* **10**:358–365.
4. Lange, J. 1993. HIV-related morbidity and mortality in sub-saharan Africa: opportunities for prevention. *AIDS* **7**:1675–1676.
5. Vugia, D. J., J. A. Kiehlbauch, K. Yeboue, et al. 1993. Pathogens and predictors of fatal septicemia associated with the human immunodeficiency virus infection in Ivory Coast, West Africa. *J. Infect. Dis.* **168**:564–570.

Xavier Anglaret
Fatoumata Sylla-Koko
Dominique Bonard
Patrice Combe
Centre de Diagnostic et de Recherches
sur le SIDA (CeDReS)

Makan Coulibaly
Eba Aoussi
Service des Maladies Infectieuses
et Tropicales
CHU de Treichville
Abidjan, Ivory Coast

François Dabis
Unité INSERM 330
Université Victor Segalen Bordeaux 2
Bordeaux, France

TABLE 1. Pathogens isolated from blood and stool cultures for adult inpatients from CHT, Abidjan, from 1994 to 1996

Culture type and pathogen	No. of strains isolated	% Strains susceptible to CMX
Blood		
Non- <i>S. typhi</i> <i>Salmonella</i>	252	86
<i>Escherichia coli</i>	68	25
<i>Salmonella typhi</i>	31	100
<i>Klebsiella pneumoniae</i>	32	53
<i>Enterobacter cloacae</i>	18	83
<i>Streptococcus pneumoniae</i>	11	27
Other	66	38
Total	478	68
Stool		
Non- <i>S. typhi</i> <i>Salmonella</i>	47	78
<i>Shigella</i> sp.	35	23
Other	19	47
Total	101	51
Grand total	579	65