

Those intestinal parasites may persist for decades with subclinical infections or low-grade disease with nonspecific manifestations. In the presence of immunosuppression, strongyloidiasis can rapidly evolve into life-threatening disseminated disease, whereas chronic schistosomiasis can lead to complications causing future morbidity and death.

Currently in France, an update of diagnostic tests reimbursed for those tropical diseases is ongoing to fully cover diagnostic needs.

Our aim was to assess the clinical relevance of tests used in schistosomiasis' or strongyloidiasis' diagnosis and include the most relevant in the national list of reimbursed tests.

METHODS:

The assessment involves a critical analysis of national and international guidelines identified by a systematic literature search, and stakeholders' views.

RESULTS:

This work identifies several autochthonous outbreaks of those diseases in France; such as urogenital schistosomiasis that occurred in Corsica, in summer 2013. Also it enlightens the increase of strongyloides serological tests performed in the past years. Those facts prove the potential development of those infections in Europe.

It underlines that, serology is the first diagnostic test line for most cases and is more sensitive than stool microscopy which represents however the final diagnostic investigation to confirm the intestinal infection.

It confirms the main indications of those two diagnostic tools.

It relies on a tropical infectious disease expert network including the French army health service. They have brought further clarification of diagnostic tests clinical relevance for travelers or autochthonous cases.

CONCLUSIONS:

This new use of Health Technology Assessment has allowed updating and listing the relevant diagnostic tools which might be crucial to better follow those diseases and it may help the health system to face the increase of tropical infections.

OP44 Cost-Effectiveness Of Hepatitis C Virus Screening In Swiss Prisons Using Rapid Tests

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INTRODUCTION:

This study explored the cost-effectiveness of expanding Hepatitis C Virus (HCV) screening and subsequent treatment in Swiss custodial settings, given the availability of rapid antibody saliva tests (Oraquick®) and dried blood spot tests (semi-quantitative viremia and viral genotype), and recent therapeutic advances which have higher cure rates and shorter treatment courses (1).

METHODS:

A comprehensive strategy offering screening to all detainees was compared to the current setup of screening high-risk individuals (for example, from endemic countries, active or former injecting drug users). A decision tree simulated the diagnosis pathway, and results from a Markov model were included to predict treatment effects and natural progression over a lifetime time-horizon. Input data were derived from clinical studies, literature reviews, custodial health services and expert opinion (2). The net monetary benefit (NMB) and incremental cost-effectiveness ratio (ICER) of comprehensive compared to current screening were calculated. Deterministic and probabilistic sensitivity analyses were performed to explore parameter uncertainty and whether variations informed

by expert opinion changed the cost-effectiveness of comprehensive screening.

RESULTS:

At a willingness-to-pay threshold of CHF100,000 (USD99,500) per Quality-Adjusted Life-Year (QALY), comprehensive screening had an 83 percent probability of being cost-effective, with a corresponding NMB of CHF33,451,972 (USD33,284,712) and ICER of CHF7,168/QALY (USD7,132/QALY). Results were most sensitive to the QALYs gained from the treatment model (both treatment and no treatment arms), respective HCV prevalence in the current and comprehensive screening populations, treatment initiation rates, and screening offer acceptance rates. Compared to the current practice of screening high-risk individuals, comprehensive screening is likely to be cost-effective due to the increase in testing rates, which were conservatively estimated in this study. Furthermore, comprehensive HCV screening of prisoners may prove more cost-effective in countries where prisoners are not routinely screened.

CONCLUSIONS:

Comprehensive screening programs could be considered in prison units with a large proportion of high-risk individuals and where detainees are incarcerated for enough time to complete a treatment course during their sentence.

REFERENCES:

1. McLeod A, Weir A, Aitken C, et al. Rise in testing and diagnosis associated with Scotland's Action Plan on Hepatitis C and introduction of dried blood spot testing. *J Epidemiol Community Health*. 2014;68(12):1182-8.
2. Dolan K, Wirtz AL, Moazen B, et al. Global burden of HIV, viral hepatitis, and tuberculosis in prisoners and detainees. *Lancet*. 2016;388(10049):1089-102.

OP45 Study On Effects Of Community-acquired Pneumonia Clinical Pathway On Antibiotics' Utilization

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INTRODUCTION:

Drug overuse in healthcare settings is common in China. Clinical pathways are tools that provide the link between the best available evidence and clinical practice. This study aimed to determine if the clinical pathway of community-acquired pneumonia (CAP) had effects on the antibiotic use in patients with CAP.

METHODS:

The study was conducted in Shanghai, Hubei Province, and Gansu Province to represent high, middle, and low levels of socioeconomic status in 2015. In each region, three public tertiary general hospitals and three public secondary general hospitals were selected for chart review of antibiotics' utilization in the patients with CAP during 2014. A multilevel logistic regression model was used in the study, with a dependent variable of appropriate utilization of antibiotics (right time, right type, and right combined use) and independent variables of hospital adoption of clinical pathway and patient characteristics (sex, age, severity of disease, and number of comorbidities).

RESULTS:

Twelve surveyed hospitals (66.67 percent) adopted CAP clinical pathways and 354 cases (66.29 percent) were from these twelve hospitals (CP group). Among the total utilization of antibiotics (796 times) in eighteen types of antibiotics used in patients with CAP, the five recommended types of antibiotics accounted for 82.16 percent.

The percentages of cases that got initial antibiotics in time were 90.60 percent in the CP group and 76.11 percent in the non-CP group. The compliance rate for appropriate types of antibiotic utilization was 88.36