ANTIBIOTIC PROPHYLAXIS FOR STIs: PROMISES OR PERILS

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Abstract Body:
Background: Every day more than 1 million of STIs are acquired worldwide, and each year there are an estimated 146 million of new infections with chlamydia, 78 million of gonorrhea and 6 million of syphilis. In the US, 2015 was the second year in a row with an increase in STIs, with syphilis increasing at an alarming rate among MSM. The implementation of PrEP for HIV prevention has also highlighted the increasing prevalence and incidence of STIs in PrEP users. Current efforts to contain the spread of STIs are obviously not sufficient. In addition to counseling and behavioral interventions including condom promotion and scaling-up of more effective STIs services, new preventive strategies have to be assessed. The success of PrEP for HIV has raised interest in biomedical interventions for STIs. Pending the development of vaccines against bacterial STIs, the potential role of antibiotic prophylaxis should be re-assessed. Early studies conducted by the military have shown the short-term efficacy and the limitations of post-exposure prophylaxis. More recently, periodic presumptive treatment in female sex workers with azithromycin alone or in combination have shown reduction in incidence of gonorrhea and chlamydia but not of syphilis or HIV. Mass treatment with azithromycin for trachoma and Yaws elimination has also shown some impact on STIs prevalence. Studies using doxycycline prophylaxis for syphilis in high risk MSM are ongoing. Such studies in selected populations should be conducted cautiously and involvement of these populations in the design, implementation and evaluation of these new interventions is crucial. Should antibiotic prophylaxis be successful at reducing STIs incidence, its short-term benefits should be balanced against the long-term efficacy of this strategy, its tolerability, cost, and more importantly the selection and dissemination of antibiotic resistance when drug resistance to gonorrhea is already a threat and only limited options are available for treatment of chlamydia.
infection and syphilis. Also, antibiotic prophylaxis might alter STIs presentation and lead to an increase in STIs not targeted by the prophylaxis, underscoring the need for this strategy to be included in a comprehensive prevention package with a close monitoring of all STIs. Conclusion: New strategies need to be developed to contain the spread of STIs. Antibiotic prophylaxis for bacterial STIs in high risk populations should be carefully evaluated.

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STRANGERS IN THE NIGHT: CHALLENGES AND OPPORTUNITIES IN STI CONTROL

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