



Commentary

Update on sexually transmitted infections

Definition

Sexually transmitted and transmissible pathogens include many types of bacteria, viruses, protozoa, fungi, and ectoparasites. Sexually transmitted infections (STIs) are complicated by the appearance of coinfections with more than one pathogen, eg, *Neisseria gonorrhoeae* with *Treponema pallidum* and even *Chlamydia trachomatis*. An increasing number of STIs are also due to newly recognized infections, along with different age groups, such as adolescents who, for example, have more coinfections and an increased incidence of nongonococcal urethritis.

Epidemiology

Homosexual male-male activity is as old as mankind, and a part of life for many men throughout society. Men who have sex with men (MSM) form a relatively new epidemiological risk group for STI and health care workers should do all they can to alleviate the vehemence and take a stand against homophobic attitudes and practices in society with recommendations to reduce the STI burden in MSM.

Since STIs were recognized, many groups have thought about how to provide care for those affected with STIs, which are most prevalent among teenagers and young adults. The incidence of STIs is rising. STIs exist in three different forms, viral, bacterial, and parasitic. Screening is recommended in all young people who may have been sexually abused or who have been found to have an STI. Risk prevention must not be a singular occasion but a continuous task.

Young people are particularly vulnerable to poor sexual health outcomes, such as STIs and unwanted pregnancy. Preventive and curative medical measures must be combined with social and psychological assistance.

Just as the skin is the organ that protects the body so STIs should be considered as a syndrome. When an infection is suspected, other endemic STIs should be excluded, as well. Apart from risk behavior, the aforementioned skin conditions also form an indication for a full STI screening, including HIV.

STIs are more frequent in some groups in the general population with given examples, as well as described epidemiological trends in STIs from the United States and Europe. Interventions to prevent the spread of STIs not only by changing personal preventive behavior but through research based on applied medical science, such as developments in chemotherapy and vaccines already efficacious in preventing hepatitis A and B and some genital human papilloma virus infections.

Considerations

Nonvenereal syphilis (endemic syphilis) has existed in Europe since the 16th century. Many characteristics of the disease are its presence for a longer time in a specific territory and its transmission regardless of age and sex, mainly extragenitally in unsanitary living conditions. Nonvenereal syphilis has been described under different names in almost all regions of Europe. The disease spreads in rural areas with poor economic and hygienic conditions. The disease may have been eradicated in Europe in the 20th century, but it is still present in some rural regions of the Arabian Peninsula, Southwest Asia, and North Africa.

The increasing rates in MSM and coinfection with HIV have allowed syphilis to thrive and eradication of syphilis may be in the near future, but is not closer than the next outbreak.

More than 100 distinct human papillomaviruses (HPVs) have now been recognized, and each is associated with a specific set of clinical lesions. They are associated with a spectrum of diseases, from benign verrucae vulgares and condylomata acuminata to the malignancies of the cervix, vulva, anus, and penis. Disease associated with HPV can be divided into skin and mucosal lesions of the genital and extragenital region. The relationship between HPV and nonmelanoma skin cancer (NMSC) is important clinically, because NMSC is the most common form of malignancy among the fair-skinned populations. HPVs have also been detected in skin tags, lichen sclerosus, seborrheic keratoses, actinic keratoses, epidermal cysts, psoriatic plaques, and plucked hairs. HPV can even be found on healthy skin. A

significant problem for investigations of an association between HPV and skin cancer is that HPV is a part of the microbiological flora of the healthy human skin. Further investigations are necessary.

HPV are the causative agents of cervical cancer, the third most common cancer in women. The development of prophylactic HPV vaccines, targeting the major oncogenic HPV types, is now the frontline of cervical cancer prevention. Both vaccines have been proven to be highly effective and safe, although there are still open questions about their target population, cross-protection, and long-term efficacy. To develop more affordable vaccines research groups are concentrated in new formulations with different antigens. The challenge for the coming years will be to provide vaccine induced protection against HPV targeting more virus types and reaching a better vaccine coverage especially in low-resource countries.

The association between human papillomavirus types and oral lesions has been shown in many studies. Distribution of positive HPV findings on oral mucosa seems to be more associated with particular anatomical locations than the diagnosis itself. Topography plays a role in HPV prevalence findings in oral lesions. Due to the higher prevalence of the high-risk HPV types in potentially malignant oral disorders, these lesions need to be continuously controlled and treated.

The presence of an erosion or ulcer over genitalia usually takes one's mind toward STIs; however, it is important to have a broader approach and consider non-STI causes, as well. Many of these, in fact, are diseases that are more common than STIs. Wrongly labeling a patient as having a venereal disease can have great psychosocial implications, apart from the resultant wrong treatment. Non-STI infective causes include: Epstein-Barr virus, tuberculosis, leishmaniasis, HIV/AIDS related ulcers, and amebiasis, as well as drug reactions, immunobullous disorders, aphthosis and Behcet's disease, inflammatory bowel disease, erosive forms of lichen

planus and lichen sclerosus et atrophicus, premalignant and malignant conditions, pyoderma gangrenosum, and hidradenitis suppurativa. The current account is an endeavor to form a focus on nonspecific genital ulcers to appraise the august audience and to enrich the didactic contents in prospective.

Gonorrhea appears to be the second most common sexually transmitted infection of bacterial origin today, especially in low-income developing countries. Gonorrhea may, on occasion, result in serious complications, such as pelvic inflammatory disease, ectopic pregnancy, infertility, epididymitis, gonococcemia, and disseminated gonococcal infection.

The most important challenge today is the emergence of multidrug resistant gonorrhea, which is currently of significant public concern. Clinicians can help prevent sequelae and the spread of gonorrhea by eliciting detailed sexual histories from their patients, screening sexually active risk group(s) for gonorrhea at exposed anatomic sites, and treating appropriately.

Recommendations

Preventive and curative medical measures must be combined with social and psychological assistance. The prevention and counseling methods, together with effective public education, are recommended to decrease the spread of STIs.

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