



## The Importance of a Multidisciplinary Approach to Patients with Sexually Transmitted Diseases

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### ABSTRACT

According to World Health Organization, in 2005, up to 450 million new cases of sexually transmitted infections caused by bacteria, viruses and parasites, including sexually transmitted infections transmitted from mother to child during pregnancy and childbirth, and through blood products and tissue transfer was estimated to occur annually throughout the world in adults. The most common infections are syphilis, gonorrhoea, chlamydia, trichomoniasis, chancroid, genital herpes, genital warts and Human Immunodeficiency Virus and Hepatitis B virus. In addition, frequently structural changes and presence of asymptomatic disease complicate routine diagnostic testing and therapeutic treatment. Collaboration between physicians is one of important points in recognition, early detection, upgrading of diagnostic tests and therapeutic treatment. On the other hand, more often if AIDS is detected, in the same patient it is possible to detect at least one additional sexually transmitted disease complicating recognition of disease etiology and planning diagnostic tests for the purpose of early disease detection and treatment, respectively. These points are important in improving the quality of patient's life and global prevention. In our case report, the proper collaboration between physicians enhanced detection and treatment of AIDS in early phase.

### KEYWORDS

sexually transmitted diseases, AIDS, syphilis, hepatitis B, sarcoma Kaposi

### INTRODUCTION

At the global level are registered each year nearly 450 million (approximately one million per day) curable and incurable sexually transmitted disease which is responsible for about 30 different bacteria, viruses and parasites, including transmission from mother to child during pregnancy and childbirth, and receiving blood and blood products in the case of infection by the human immunodeficiency virus (HIV) and syphilis (1). The most important conditions are gonorrhoea, chlamydia, and Trichomonas infections, syphilis, chancroid, genital herpes, genital warts and infection with HIV and hepatitis B virus (1). Acquired Immunodeficiency Syndrome (AIDS) is a dangerous and deadly disease of the human immune system caused by HIV, which attacks the immune system in which it prevents damage and defense of the human body from the harmful effects of various diseases (2). HIV is one of a group of retroviruses that attacks mature T4 cells that directly participate in the defense against many diseases. In 1981st The Center for Disease Control and Prevention was first recognized AIDS as a disease, and during the first half of the 80-ies of the twentieth century, HIV was identified as the causative agent (3, 4). Croatia in 1985. The reports of the first patient and by October 2012th year registered a total of 1002 people with AIDS, with the subgroup of intravenous drug users accounted for the majority of patients (5). The appearance of the disease is characterized by a reduction in the number of leukocytes in the blood, and lymphocytes in the lymph nodes and spleen, and a reduced number of mature T lymphocytes and decreased levels of antibodies. In patients with AIDS, can often be detected and other sexually transmitted diseases that are commonly syphilis, gonorrhoea and hepatitis (6-10). Syphilis (lues) is a sexually transmitted disease caused by the bacterium *Treponema pallidum*, which can be said to be extinct, but lately we can increasingly meet on (8-10). The organism penetrates through the vagina, mouth or skin, enters the lymph nodes and spread throughout the body (11, 12). Symptoms that occur with syphilis and divided three stages. The primary stage

is characterized by the finding of a wound or ulcer usually on the penis, mouth, tongue, cervix or fingers 1-13 weeks after infection and moved to open the bloody not painless wound that after 3-12 weeks to heal, and then performs a secondary stage that occurs 6-12 weeks after the primary stage is characterized by sores in the mouth, proteinuria, a feeling of exhaustion, loss of appetite, nausea, fever, anemia, and rarely jaundice (12). After that performance latent stage where there are no signs of disease, and it's followed by the tertiary stage of syphilis, which is not contagious. There is the appearance of benign tertiary syphilis, cardiovascular syphilis and neurosyphilis (12). Diagnosis is made according to the instructions Laboratory research sexually transmitted diseases, most notably through the rapid plasma reagirajućeg test (Rapid plasma reagin) or absorption test fluorescent antibody treponemskog who must show a positive reaction (8, 12). Viral hepatitis is an inflammatory disease of the liver that is caused by hepatotropic viruses in this group include cytomegalovirus, Epstein Barr virus, Coxsackie virus, varicella zoster, herpes simplex, adenovirus, rubella virus, parotid virus, measles virus, and the like disease (10, 13). There are 5 types of hepatitis A, B, C, D, E and non-ABC hepatitis. Hepatitis A is a contagious epidemic disease that migrate feko-oral route, and in the less developed countries of lower socioeconomic living conditions. Hepatitis B is a contagious disease that is transmitted through sexual contact and through blood, as a result of an infection caused by a virus caused by chronic hepatitis, liver cirrhosis and hepatocellular carcinoma. A similar pattern is observed in hepatitis C (10, 13). Symptomatology of other sexually transmitted diseases do not enter into the subject of this article, so we do not describe them further. Furthermore, the change in the form of various microorganisms and the presence of asymptomatic disease in certain situations makes routine diagnosis and timely testing of potentially affected (14). On the other hand, more often with AIDS is present in at least one of the aforementioned sexually transmitted diseases, which further complicates identification of disease etiology and proper routing

of diagnostic tests that can contribute to the early detection and timely treatment (9, 11). Early detection of disease and targeted therapy significantly improves the patient's quality of life and possibly a cure. In our view, ill man of AIDS, based on previously exposed to complex problems in determining algorithm diagnostic procedures, will stress the importance of communication among physicians to provide a multidisciplinary approach to the patient for the purpose of recognizing the true etiology of the disease especially in the early stages and subsequent efficient treatment.

#### **CASE REPORT:**

Male patient aged 45 years appears in the first half of the 2012th The Dental Clinic in light of changes in the right upper jaw and palate, and difficulty swallowing that lasts a year ago. From the clinical examination allocated expressed cachexia, nipple changes in the skin, and anamnestic patient again complains of constant fatigue and sub-febrile temperature and stomach pain and joint pain. Based on the medical history of increasing the scope of complaints indicates a detailed clinical evaluation by a specialist in internal medicine. Macroscopic determine bilateral retromolar hyperplasia right upper jaw, dark blue to brown, extending to the middle palate, not fading to external pressure and focal bleeding (Figure 1). Underwent biopsy promjenog part in the oral cavity and one lesion which was located on the chin. Specialist Pathologic histological changes in the epithelium covering the mouth could fit in viral infection, based on epidemiological and medical history as well as changes in the binder differential diagnosis indicated the Kaposi's sarcoma (Figure 2). Leather changes suggested a viral verrucae. In the opinion of the biopsy suggested the expansion of treatment in terms of exclusion of KS, with a recommendation to do haematological and serological testing. The current blood picture predominantly decreased iron, hemoglobin, hematocrit, and lymphocytes and increased neutrophils. Indicated the immunological treatment, HLA tissue typing, hepatitis markers, and HIV testing. Immunological tests showed hypergammaglobulinemia, elevated beta and gamma globulin with reduced alpha globulins, decreased CH50 and C3 and NK cells, decreased CD3/CD4 with elevated CD3 and CD3/CD8 and elevated total protein. Tissue indicating that no genetic changes, and markers of hepatitis B showed a positive reaction. The patient was referred to the Division of AIDS Clinic for Infectious Diseases "Dr. Fran Mihaljevic" in Zagreb, where, after a confirmed positive result of HIV, began indicated and tailored therapy the patient. After the implementation of hospitalization and patient education, the patient regularly comes to the control of the Dental Clinic and the Department of AIDS, it feels good, and the changes in the oral cavity were withdrawn in less visible brownish stains located on the back of the palate.

#### **DISCUSSION**

Long known to the diagnosis and identification of sexually transmitted diseases are not only subject to one physician specialty but the knowledge and skills needed within the other branches to medical specialties, as well as a specialist dentist. Further aggravating circumstances diagnosing STDs are patient compliance and accuracy of medical history, with experience and mutual cooperation between physicians are invaluable in terms of detection of sexually transmitted diseases and their prevention, as well as in order to ensure prompt treatment of individual cases. Many authors have confirmed suspicions that speak in favor of suspicions that a sexually transmitted infectious disease may not be present in patients who had

been exposed to high-risk group, but in the same patient can be diagnosed several sexually transmitted diseases (9, 11, 16-20). Begovac et al. investigated a group of patients with SIDA which is further defined and infection with hepatitis B virus (15). Passon in his study found a combination of sexually transmitted diseases, HIV and hepatitis B virus infections with present and malignant syphilis (16). Research Smikle et al. focused on the proportion of active or chronic hepatitis B in HIV-positive patients (17). In the study, Campos and his associates found that the prevention and awareness of sexually transmitted diseases in psychiatric patients is lower than in a population with no diagnosed mental illness, suggesting the possibility of unhindered spread of sexually transmitted diseases, both within the same subgroups as well as in the general population with no diagnosed mental illness (18). Lima and his associates researched and found that pregnant women in Brazil there is a high percentage of the presence of sexually transmitted diseases such as HIV, syphilis, hepatitis B or C (19). Similar research conducted Kupek and associates (9). Ruan et al. confirmed that STDs are in a very high percentage of the homosexual group, which is usually diagnosed syphilis, HIV and hepatitis, wherein the Todd et al. confirmed that the injectors increases the share of STDs additional oral sex (11, 16). Based on prevention makes continuous education of the general population, risk groups and registered patients, proper protection during sexual intercourse, disposable needles, gloves, and control of blood and tissue transplants (2, 3, 6, 7). In our case, when the enlargement process, and HIV testing, we tested and proven markers of hepatitis B and thus partly confirm previous observations of many researchers.

#### **CONCLUSION:**

Good and detailed case history and detailed clinical findings will result in a proper algorithm diagnostic procedures that allow diagnosis of the disease. Cross-team collaboration more specialist medical practitioners and dental specialists in our case has enabled faster and easier planning of diagnostic procedures, and reaffirmed that the timely collaboration and team doctors of various specialties required in a planned and targeted diagnostics for early determination of the causes of disease, and timely administration of and targeted therapies. A multidisciplinary approach to addressing the symptoms and diagnostic procedures of planning is the key to success in detecting the etiology of sexually transmitted diseases and timely administration of therapy during which the patient has a direct benefit in terms of potential cures or longer time may be successfully kept under control, and the environment in which the patient lives and safer in terms of preventing the spread of disease.

#### **PATIENT'S PERSPECTIVE:**

I came with a high temperature that lasted for a while. My gingiva enlarged I couldn't swallow without pain. I felt weak and tired. After a detailed exam, they took a tissue sample and I was sent to a series of tests. I was positively surprised by the approach of the doctors, their co-operation and their efficiency of detecting my diseases after which I was given therapy.

#### **COMPETING INTERESTS:**

My competing interest is to prove that many diseases do not specifically have to necessarily reside on the body. The starting symptoms can occur inside the mouth as non-specific states. And so, it is of great importance to do a detailed anamnesis, a detailed diagnose and to have a multidisciplinary approach to the disease itself.

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