CASE REPORT

HIV; IS IT NOW AN EPIDEMIC

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ABSTRACT

Background: An HIV positive individual from nontraditional background presented with abdominal lymphadenopathy. The human immunodeficiency virus (HIV) is a lenti virus (a subgroup of retrovirus) that causes HIV infection and AIDS (acquired immunodeficiency syndrome). AIDS is a condition in which progressive failure of the immune system allows life threatening opportunistic infections and malignancies.

Methods: We present a case of 40yrs male, who presented with abdominal pain, vomiting and diarrhea accompanied with weight loss. Laboratory data shows pancytopenia, raised lactate dehydrogenase, CT scan abdomen reports; multiple enlarged lymph nodes along celiac trunk, mesenteric vessels, para-caval, aorto-caval, peri-pancreatic regions respectively.

Results: Findings were suggestive of lymphoma. His HIV antibody (on ELISA) was positive and he was advised to be followed it up by western blot technique.

Conclusion: This case report suggest that even a person not belonging to a traditional high risk group can have HIV and its complications such as lymphoma.

KEY WORDS: Human immunodeficiency virus, acquired immunodeficiency syndrome, vomiting, diarrhea, weight loss.

INTRODUCTION

In 2009, UNAIDS Pakistan and the national AIDS control programme estimated that there were around 98 000 (79 000–120 000) HIV cases in Pakistan, with an overall general population prevalence of less than 0.05%.

However, the epidemic is expanding among parentral drug users, with an estimated prevalence of 20%, and their sexual contacts, including male and transgender (hijra) sex workers, with rates of 2%–3% and 4%, respectively.

National surveillance data shows rates of infection in most major cities ranging from 15% to 50% among the country's estimated 150 000 injecting drug users.

Like many developing countries, Pakistan faces elevated risk of HIV transmission as a result of poverty, low literacy, gender-related discrimination, ignorance about modes of transmission and the stigma that prohibits people with risk behaviours from seeking HIV testing or disclosing their HIV positive status.

CASE REPORT

A 40yr male, office worker, came through emergency with the presentation of abdominal pain, vomiting and loose stools for 2 weeks associated with decreased apettite and weight loss. Abdominal pain was generalized, colicky in nature. Vomiting 2-3 episodes/day, non projectile, containing food particles but no blood, occurred usually after taking food. Loose stools were 6-8 episodes/day, small, watery, with no blood or mucus. No significant past surgery, blood transfusion, dental procedures, I/V drug abuse and extra-marital sexual contacts.

On examination, patient was thin built, well oriented, pale and dehydrated but with no palpable lymph-nodes. Pulse 92/min, regular, B.P 110/60(no postural drop), temp 100*F & resp.rate18/min. Systemic examination unremarkable.

CBC showed; Hb 6.7(MCV 93.7), WBC 3200(Gr 64%, Lymph 30%, Mono 4%, Eosin 2%), Platelets 164x 103/µL which subsequently dropped down to 71x 103/µL retic count 0.5% and blood picture showed pancytopenia with aniso, microcytosis & hypochromia. ESR 90. M.P., Dengue-IgM negative, LDH 1395. M.T negative. Na 125, K 3.3, HCO3 22, Cl 88, Urea 40, Cr 0.8, Ca 9.SGPT 41, GAMA.G.T 85, Total proteins 6.4, albumin 3.5, globulin 2.9. HBsAg and Anti HCV negative .Stool D/R revealed loose consistency, puscells 30-35 with no fat globules. HIV Antibody(on ELISA) positive with Western blot to be followed for confirmation. C.Tscan abdomen showed, multiple enlarged lymph-nodes along celiac trunk, mesenteric, para-caval, aorto-caval, para-aortic, peri-pancreatic regions & multiple small subcentimeter hypodense nodes seen around spleen, the findings suggestive of lymphoma.

DISCUSSION

Since the emergence of AIDS in 1981, an association between HIV infection and the development of specific cancers has been recognized. This group of cancers includes the three AIDS-defining malignancies: high-grade B-cell non-Hodgkin's lymphoma (NHL), Kaposi's sarcoma (KS) and invasive cervical cancer. Immune suppression rather than HIV itself is implicated in the pathogenesis of these malignancies, with a clear correlation between the degree of immune suppression and the risk of developing NHL and KS. In addition, an increased incidence of other non-AIDS-defining cancers, including Hodgkin's lymphoma (HL), has been noted. High-grade B-cell NHL is the

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second most common malignancy affecting HIV-infected individuals. Diffuse large B-cell lymphoma (DLBCL), which includes all immunoblastic lymphomas, is the most frequent histological type occurring in the HIV-infected population and accounts for 80% of cases. The remaining 20% of HIV-related NHL comprise small noncleaved cell lymphomas, such as Burkitt's lymphoma (BL). In the pre-HAART period prior to 1996, registry linkage studies found the incidence of NHL was between 60- and 200-times greater in HIV-infected adults compared with the general population. NHL accounted for 1.2% of first AIDS-defining illnesses, 3–3.6% of all AIDS-defining illness each year before 1996, and 16% of all deaths attributable to AIDS. The introduction of HAART in 1996 dramatically changed the landscape of HIV-related infection and malignancy. Morbidity and mortality in those with HIV-related lymphoma has improved, with survival rates approaching those observed in non-HIV lymphoma.An international meta-analysis of 20 cohort studies compared incidence of NHL between the pre-HAART era (1992–1996) and the post-HAART period (1997–1999). There was an overall decline in incidence of NHL, particularly in primary cerebral lymphoma and systemic immunoblastic lymphoma, but not in BL or HL. More recent cohort studies have confirmed these trends, with data showing that the incidence of HIV-related NHL has fallen by half since the introduction of HAART

The reason for discussing this case is that even in the post-HAART era the HIV has not been picked up early and first time presenting with AIDS and complicating problems like lymphomas, the reason for this is lack of awareness in people as well as not even realized by the health care professionals in early part of a disease we should have to pick the alarming symptoms with a proper history, examination and laborartory findings that looks inappropriate in a patient. As in this case, the diarrhea not responding to usual treatment, weightloss, the lymphocyte count although 30% but inappropriate for this patient as the WBC

was3200 and absolute lymphocyte would be 960 and as a rough estimation CD4 count is one-fifth of lymphocyte count so it is approximately 192 cells which is low and unfortunately we were not able to do much as the patient died a week after presentation.

REFERENCES

1.Berel V, Peterman T, Berkelman R. et al., AIDS-associated non-Hodgkin's lymphoma. Lancet; 1991337805–809.809 2.Grulich AE, van Leeuwen MT, and Falster MO, Vajdic CM: Incidence of cancers in people with HIV/AIDS compared with immunosuppressed transplant recipients: a meta-analysis. Lancet. 2010; 4(6):649-659.

3.International Collaboration on HIV and Cancer: Highly active antiretroviral therapy and incidence of cancer in human immunodeficiency virus-infected adults. J. Natl Cancer Inst 2000; 92:1823–1830

4.Long JL, Engels EA, Moore RD, Gebo KA: Incidence and outcomes of malignancy in the HAART era in an urban cohort of HIV-infected individuals. AIDS 2008; 22:489–496 5.Stebbing J, Gazzard B, Mandalia S et al., Antiretroviral treatment regimens and immune parameters in the prevention of systemic AIDS-related non-Hodgkin's lymphoma. J. Clin. Oncol 2004; 22:2177–2183

6.National AIDS Control Programme ministry of national health services, regulations and co-ordination government of Pakistan.

7.WHO EMRO | HIV / AIDS | PROGRAMMES | PAKISTAN Attitudes and acceptability on HIV self-testing among key populations: a literature review "AIDS and Behavior 2015 8.The strategic use of antiretrovirals to prevent HIV infection: a converging agenda Clinical Infectious Diseases supplement on HIV postexposure prophylaxis ,2015 9.Threading the Needle. How to Stop the HIV Outbreak in Rural Indiana Steffanie A. Strathdee, Ph.D., and Chris Beyrer, M.D., M.P.H. N Engl J Med 2015; 373:397-399