ISSN:2476-2377

Case Report

International Journal of Cancer Research & Therapy

A Patient with an Extended Window Period of AIDS Complicated with Gastric Cancer

LUO Qiu-yue[1]*, WANG Li-juan[1], LI Ya-Ling[1], Song Ting-ting[1], Ding qian[1], Lv Pan-pan[1], Yao De-yi[1], Cai rui[1] and Xiong Shao-quan[2]

[1]*Chengdu University of Traditional Chinese Medicine, Chengdu, 610075, China*

[2]*Affiliated Hospital of Chengdu University of Traditional Chinese Medicine, Chengdu, 610075, China*

***Corresponding author**

LUO Qiu-yue, institution Chengdu University of Traditional Chinese Medicine, Chengdu, 610075, China, E-mail: 1498341374@qq.com

Submitted: 01 Apr 2018; **Accepted**: 08 Apr 2018; **Published**: 25 May 2018

Abstract

This report describes a case of a postoperative gastric cancer patient with AIDS whose window period is extremely longer than normal. The patient suffered from recurrent pulmonary infection after operation. Multiple and Broad-spectrum antibiotic was employed but the curative effect was not satisfying. Occurrence of anemia made the disease much more complicated, and the patient was finally diagnosed AIDS. We analyze the factors that may prolong the window period. Because the postoperative gastric cancer patient are susceptible to infection, which caused by poor nutrition status and immune compromise, it is easy to overlook the possibility of AIDS. And we found TCM treatment of AIDS has been an unexpected result in this patient.

Keywords: Gastric Cancer; AIDS/HIV; Window Period; TCM

Introduction

"Acute window period" of 3 to 6 weeks have been widely accepted. Nevertheless, in rare cases, patients do not develop HIV antibodies despite demonstrable infection. In 2005, a case report, was published describing a patient with common variable immunodeficiency who lacked HIV antibodies over a 10-month period but had repeatedly detectable HIV-1 viral loads as high as 300 000 copies per milliliter [1]. HIV antibody test may not be sufficient to diagnose all subjects with HIV infection.

Gastric cancer is an important public health challenge as the fourth most common cancer and the second cause of cancer mortality worldwide [2]. Surgical resection is the mainstay of treatment for gastric cancer [3]. While Patients with HIV infections more often present with a specific malignancy, such as Kaposi's sarcoma and non-Hodgkin lymphomas [4]. Herein, we describe a case of an extended window period HIV-1 infection patient who presented with gastric cancer.

To our knowledge, this patient is the first report of an extended window period HIV-1 infected patient who presented with gastric cancer. Two clinical questions are raised: the well-known "window period" applies to "special patients", for example a patient with severe immunodeficiency; and plasma RNA test should be installed for diagnosis of some rare seronegative HIV infections with presentation of severe immunodeficiency.

Case Report

A 60-year-old male presented with Paroxysmal left upper abdominal pain, aggravated after eating, with acid reflux, nausea, and vomiting in February 2014. He had accessed to prostitutes several times in 2013. Esophago-gastro-enoscopy revealed a 4.0x5.5cm mass at the posterior wall of the middle and lower part of gastric body along the greater curvature, from which biopsies showed adenocancer. HP (-). Scans of CT showed significantly increasing uptake at the described location. No evidence of metastases was appreciated. Infection markers including HIV antibody, Syphilis were negative. On March 3, 2014. Billroth I gastrectomy and D2 lymphadenectomy were performed. Postoperative pathologic diagnosis was ulcerative type moderately-poorly differentiated adenocancer, Tumor infiltrating muscular layer of stomach, Lymph node negative (0/18). No blood transfusion was performed during the operation. No other interventions were undertaken. On the fifth postoperative day, the patient had a fever, and the maximum temperature was up to 39.6 ºC. The symptoms were stepping with cough, spitting yellow thick phlegm, and the patient was diagnosed with pulmonary infection. The patient was given treatment such as anti-infection and rehydration, which alleviated the symptoms. But the patient admitted hospital many times because of pulmonary infection repeatedly. In March 2016, the patient coughed and spitted yellow thick phlegm again, with dizzy, feeble, and palpebral conjunctiva were pale. Blood data were as follows: $CD4^+$, 28%; $CD8^+$, 70%; $CD4^+$ /$CD8^+$, 0.4, HB 66g/l, HIV-1 antibody (+), HIV viral load was > 124 copies/ml. The patient insists on traditional Chinese medicine, and other therapy including highly active anti-retroviral therapy (HAART) was adopted recently. On March 28, 2017,the last Lymphocyte detection manifested $CD4^+$, 36%; $CD8^+$, 45%; $CD4^+$ /$CD8^+$, 0.8.and

the HIV viral load was <40 copies/ml. The patient's course after taking Chinese medicine is shown in Fig. 1.

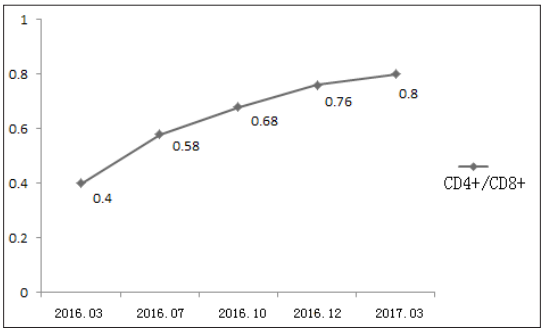

Figure 1

Discussion

This report describes a case of an extended window period HIV infection patient who presented with gastric cancer. Although the cancer and surgery leading severe immunodeficiency made the diagnosis more difficult.

When the diagnosis of HIV infection and AIDS was eventually made, the patient eventually admitted that he acquired HIV via sexual contacts before May 2013, but the infection markers were still negative in May 2014. His window period lasted at least one year, which greatly exceed the generally acknowledged of window period. There are several possibilities for repeatedly negative of HIV antibody results in these HIV-infected patients. Some recognizable reasons, such as early antiretroviral therapy, or B-cell functional defects, could not explain the case in our patient [5,6]. The possibility of infection with a rare strain (such as HIV Group N or M) undetectable by ELISA screening test also seems unlikely because of the rarity and geographic distribution of these strains [7]. The most likely cause of negative HIV antibodies tests in our patient was the poor nutrition status and immuno compromise. Though the exact cause of HIV seronegativity remains unclear, most such cases, tend to present with severe immunodeficiency associated with opportunistic infections and wasting syndrome, delayed diagnosis of HIV infection, as well as rapid disease progression. This phenomenon is worth further investigations [8-11].

Reviewed 26 cases of seronegative HIV-1 infection reported worldwide over the years, they all had a rapid disease progression and poor prognosis [7,8]. None of these 26 patients presented with gastric cancer as seen in our case. Therefore this case was a substantial clinical challenge for his physicians. And the major purpose of using traditional Chinese medicine is anti-cancer. Surprisingly, the patient gain additional benefits from TCM. His $CD4^+$ /$CD8^+$, the characteristic laboratory indexes had been improved. The index restored to normal since HAART have been added from December 2016. Despite the mechanism is still not clear, TCM is still an effective treatment that we can use.

In summary, we reported here a rare case of an extended window period HIV infection patient who presented with not AIDS-defining neoplasms whose diagnosis of HIV infection was delayed for at least one year due to the first negative HIV antibodies tests. Our report raises two clinical questions and proposed an adjuvant treatment of AIDS that effective for the patient. Clinicians caring for patients with opportunistic infections or not AIDS-defining neoplasms or severe immunodeficiency and poor nutrition status, but for whom screening HIV results are negative first, should be screening HIV antibody test repeatedly. Meanwhile the window period for these patients is subject to further observation. After diagnosed, if the patient is not willing to take or physical state cannot tolerate HAART, TCM is another way.

Acknowledgement

This project was supported by the grant from Natural Science Funding of China (81573968) and Science and Technology Department Funding of Sichuan province (2017JY0327). We would like to all the health care providers for taking care of this patient.

References

1. Padeh YC, Rubinstein A, Shliozberg J (2005) Common variable immunodeficiency and testing for HIV-1. N Engl J Med 353: 1074-1075.
2. Neamat Karimi, Jalil Rashedi, Behroz Mahdavi Poor, Sepideh Arabi, Maryam Ghorbani, et al. (2017) Cytotoxic effect of rosemary extract on gastric adenocancer (AGS) and esophageal squamous cell cancer (KYSE30) cell lines. Gastroenterol Hepatol Bed Bench 10: 102-107.
3. Ernest Fonocho, Nail Aydin, Srini Reddy, Subhasis Misra (2017) Recurrent gastric cancer etastasizing to the bone marrow: A case report of a rare presentation. Int J Surg Case Rep 37: 165-168.
4. Tsutomu Kaetsu, Masatoshi Kawamura, Shin-ichiro Kameyama, Masaki Ohori, Lima N. et al. (2000) Successful curative resection of gastric cancer with AIDS infection. Gastric Cancer 3: 151-155.
5. Hare CB, Pappalardo BL, Busch MP, Karlsson AC, Phelps BH, et al. (2006) Seroreversion in subjects receiving antiretroviral therapy during acute/early HIV infection. Clin Infect Dis 42: 700-708.
6. Bodelle P, Vallari A, Coffey R, McArthur CP, Beyeme M, (2004) Identification and genomic sequence of an HIV type 1 group N isolate from Cameroon. AIDS Res Hum Retroviruses. 20: 902-908.
7. Aboulafia DM (2000) The epidemiologic, pathologic, and clinical features of AIDS-associated pulmonary Kaposi's sarcoma. Chest 117: 1128-1145.
8. Martin TM, Rich JD (2009) Fatal HIV encephalitis in HIVseronegative patients. Emerg Infect Dis 15: 129-131.
9. Spivak AM, Sydnor ER, Blankson JN, Gallant JE (2010) Seronegative HIV-1 infection: a review of the literature. AIDS 24: 1407-1414.
10. Spivak AM, Brennan TP, O'Connell KA, Sydnor E, Williams TM, et al. (2010) A case of seronegative HIV-1 infection. J Infect Dis 201: 341-510.
11. Sullivan PS, Schable C, Koch W, Do AN, Spira T, et al. (1999) Persistently negative HIV-1 antibody enzyme immunoassay screening results for patients with HIV-1 infection and AIDS: serologic, clinical, and virologic results. Seronegative AIDS Clinical Study Group. AIDS 13: 89-96.