JOURNAL OF MODERN NEUROLOGY
http://www.physi-med.com

CASE REPORT

A Case Report of Adult-Onset Immunodeficiency Mainly Characterized by the Clinical Manifestations of Systemic Polyserositis and Infection

Hongmei Din[1], Hongbin Fan[1], Deqing Geng[2]

[1] *Affiliated Hospital of Xuzhou Medical University*
[2] *Department of Neurology Xuzhou Jiangsu 221003*

ARTICLE INFO

Article history:
Received: 21 Sep, 2015
Revised: 5 Feb, 2016
Accepted: 14 Feb, 2016
Published online: 16 June, 2016

Keywords:
the similar of AIDS; more serous cavity involvement; hydrops; infection; case report

ABSTRACT

AIDS-like disease sufferers display AIDS-like symptoms of low immunity (Less blood CD4 cells). But different form AIDS, the HIV virus can't be detected from the AIDS-like disease under current detection techniques. At present, Asians make up a major part of the group that has been diagnosed with AIDS-like, and most of them come from Thailand and Taiwan area of China. The average age of onset was about 50 years old. The study found that, tropical and subtropical regions like the Southeast Asia and Taiwan, due to the hot humid climate and density population, becoming a high incidence of AIDS-like disease. AIDS-like disease is caused by a specific antibody (Anti gamma interferon autoantibodies) produced in the body of the patients, which can attack and phagocyte the white blood cell hormone, leading to a decline in the body's immune system against mold, Mycobacterium, Salmonella and other specific bacterial infections. Sufferers display AIDS-like clinical symptoms, such as repeated fever, bone and skin fungal infection, and even systemic mixed infection, etc. Whether the disease is contagious and its treatment is still unknown.

Case data

Patient Gender: Female Age: 24 male Work in Suzhou before the disease

[Complaints] Repeated fever for 2 months and uncon-

First author: Hongmei Din, Department of Neurology, affiliate hospital of Xuzhou Medical University, Xuzhou city, Jiangsu Province 221002, P.R. China.

sciousness for 15 days, and was admitted to the hospital on May 14th, 2012 (Admission Number: 0619882).

[History of past diseases] The patient had a history for 15 years of hepatitis B, and physical health in the past.

[Family history] No family history of unrelated diseases.

[Individual history] No bad habits, unmarried, but have a girlfriend.

[Physical examination] Temperature: 37.5℃ , plus: 95 times per minute, breathe: 18 times per minute, blood pressur : 110/70mmHg. The skin has no obvious bleeding and jaundice, and the lymph nodes were not palpated. Double lung has respiratory harshness. A few moist rales have been audible over both lung. The rhythm of the heart was regular, and pathological murmur was not heard. The abdomen was soft, the liver and spleen were not palpated under the ribs. No masses were palpated on the both lower extremities. [Physical examination of nervous system]: He has some Shallow coma, the pupil size of both eyes was equal, the diameter is about 2.5mm, and exist the pupillary reaction to light. Both sides nasolabial sulcus is symmetrical, the muscular tension is low to be able to voluntary movement. Pain stimulation can make the limbs activity, double upper limb tendon hyperreflexia, double lower limbs normal tendon reflex, double lower limbs pathological positive. The other symptoms like neck resistance and positive brinell character and gram were detected. He didn't cooperate ith the rest of the inspection items. [The check in other institution] There is nucleated cell (2*10*6/l), chloride tendency (138.7mmol/l), sugar tendency (4.1mmol/l) and protein (1.036g/l) detected in the cerebrospinal fluid, and the TB-DNA was negative. Bacteria, acid bacillus and fungus was not detected (outside institute on May 2nd, 2012) ; [Full exam of virus]: The Hepatitis B surface antigen, HBeAb, and HbcAb were positive, the Syphilis antibody and antibodies to HIV were negative (outside institute on May 2nd, 2012); HBV-DNA (1.0× 10*3copies/ml) (outside institute on May 3rd, 2012); Hydrothorax displayed light yellow and slightly mix. Li Fan check is positive, with karyocyte (2352× 10*6/l), total protein (35.9g/l), Carbohydrate (7.5mmol/l), ADA (11U/L), LDH(352U/L) and CPR(33.39mg/l), bacteria and acid bacillus were not detected (outside institute on May 4th, 2012). No bacterial growth in blood culture (outside institute on May 7th, 2012); [Biochemistry]: Albumin (28.4g/l), cereal third transaminase (42U/L), aspertate aminotransferase (5942U/L) (outside institute on May 9th, 2012); [Blood routine examination]: White blood cells (16.34× 10*9/l), neutrophils (9.89× 10*9/l), eosinophils (3.04× 10*9/l), erythrocyte (3.23× 10*12/l), hemoglobin (96g/l)(outside institute on May 9th, 2012); [Electrolyte]: potassium (3.98 mmol/l), sodium (132.5 mmol/l), chloride (93.2 mmol/l), no abnormal in urine routine, tumor marker, brain natriuretic, cortisol, ACTH, FSH, LH, E2 and thyroid function (outside institute on May 12th, 2012); [Chest CT] Under the two lungs it was infected with tuberculosis, effusion in the two side pleural, inner mediastinal lymphadenopathy, and increase on both sides of the axillary were detected (outside institute on May 2nd, 2012); [Skulls CT] No obvious abnormal (outside institute on May 2nd, 2012); [Epigastrium color Doppler ultrasound] Liver area photoelectric was intensive, no abnormal in the gallbladder and pancreas, the spleen enlargement and the effusion in the right pleural were detected (outside institute on May 4th, 2012); [Double kidneys color Doppler ultrasound]: No obvious abnormal; (outside institute on May 9th, 2012); [MRI enhancement scanning]: No obvious abnormal; (outside institute on May 10th, 2012); [Encephlogram]: Had a light to moderate abnormal, the delta and the theta frequency band energy was increased; (outside institute on May 13th, 2012); [Quick check after admission] According to the blood routine examination: white blood cell (11.86× 10*9/l), neutrophils (10.70× 10*9/l), lymphocyte(0.5× 10*9/l), RBC(3.79× 10*12/l), hemoglobin (105g/l); According to the blood biochemical examination: Albumin (31.7 g/l), cereal third transaminase(61 u/l), aspertate aminotransferase (199 u/l), and no abnormal in renal function, blood fat and blood electrolytes. Sudden happened unconsciousness at about 8 o'clock next morning. The physical examination revealed that the pupil size of both eyes was not equal, the diameter of the left side was 4.0mm, 6.0mm in diameter on the right side, and papillary reaction to light was absent. The possibility for cranial cerebral hernia caused by high pressure formation was considered. He was given mannitol dehydration of intracraninal pressure after 10 minutes, turned conscious, the pupil size of both eyes turn equal, the diameter was about 3.0mm, and exist the pupillary reaction to light. Next morning, he was given Lumbar puncture cranial pressure measurement (200mmH2O) and examination of cerebrospinal fluid, it revealed that Pan's experiment (2+, WBC-BF9.0× 10*6/l),single nuclear cell number (6.0× 10*6/l); Biochemistry (GLU4.1mmol/l, Cl117.3mmol/l, PROT3.00g/l).He was given treatment for chemotherapy, dehydration of intracraninal pressure to fight infection, protect gastric mucosa and supporting control treatment. He had diarrhea on May 18th, the check of dung conventional revealed that the sample was yellow and pus, Microscopy 3 + WBC, RBC microscopy 2 +, fat ball and parasites were not detected. Diarrhea was stopped after treatment. Granulocyte obvious hyperplasia and enlargement of particles were detected through the bone marrow examination given on May 24th. The amount of pleural effusion and a small amount of pleural effusion were respectively detected on the left side and the right side. He was given pleurocentesis immediately, and the hydrothorax displayed light yellow and slightly mix. Li Fan check is positive,

WBC-BF (430.0 × 10*6/l), single nuclear cell number (284.0 × 10*6/l); Biochemistry examination revealed TP34.9g/l, ALB19.8g/l,LDH520U/L,ADA18U/L; After repeated chest colour to exceed examination, the bilateral pleural effusion was gradually reduced after times of puncture treatment. The immunofluorescence blood tests revealed the result (CD375% ,CD423% ,CD849% , CD4/CD80.47，CD191% CD16+CD5619%); Hospitalization for autoimmune series are negative, ANCA，HIV and TP were negative , ASO and ESR were normal, hs-c-reactive protein(22.80mg/L).A small amount of effusion on the right side of bowel loops was detected in the abdominal ultrasonography on June 5th. Little amount of pericardial effusion was detected in the UGG on June 7th. Cranium CT, MRI scan + enhance and Cranium CTV were normal. The pancreas volume swell, and the dim in peripancreas, retroperitoneal, and the fat around the local loops space, pleural effusion with lower lobe expansion both lungs, the pericardium a small amount of effusion were detected in the upper abdominal CT scan on May 21st.The result of blood amylase check was normal. The chest CT on May 24th revealed that bilateral pleural effusion and the two lungs atelectasis; Within the mediastinum and two axillary slightly enlarged lymph nodes in shadow; Center of the pelvic scan + epigastric enhancement on June 8th revealed: 1. belly bowel mild expansion effusion, pelvic a small amount of effusion, little older retroperitoneal lymph nodes; 2. bilateral pleural effusion and the two lungs atelectasis; a small amount of effusion was detected in the pericardium. color Doppler ultrasound on June 26th revealed there was a small amount of pleural effusion on both sides. The patients have been repeatedly fever, up to 40.0 ℃ , he was given Lai ammonia aspirin or indomethacin suppository processing fever, but without obvious antipyretic effects. With encephalitis and pleuritis gradually improving, fever was also gradually improve. The left upper lobe patch article show in the right pleural thickening slightly between leaf was detected in the Check CT On July 3rd. The fever and effusion were improved after treatment and left hospital on July 14rd. He had occasional fever when he went back to his hometown Anhui, and back to normal body temperature after taking fever-reducing medication. He had a fever again three days after returning to Suzhou in August, with rising temperature, then was admitted by the Beijing 301 hospital. Latent tuberculosis infection was considered and gave him antituberculous therapy, with effection. The patient was admitted by our hospital again in September and exist pleural effusion, so gave him chemotherapy and anti-infection treatment for more than 20 days, the fever was improved, but had a fever again after a week. Patient had a pain around the right knee when he was admitted second time, the knee joint ray films was performed, without abnormal.

Discussion

Adult-Onset Immunodeficiency was first discovered in 2004, Sarah Brown (the national institute of allergy and infectious diseases of USA, women scientist) is currently in conjunction with Thailand and Taiwan scientists for research. Since she began to study, in a short span of six months she collected 100 cases, a total of 200 cases were reported so far. Since the collected cases were from Asians, the scholars from Taiwan who was involved in the research call it the 'Asian new immunodeficiency syndrome' [5].According to the report of The New England Journal of Medicine published on August 23 rd, over the past eight years, most cases were found in Thailand and Taiwan, including some Asians in the United States . Brown said, this was another kind of acquired immune deficiency syndrome, the average age of onset was about 50 years old. This is a kind of adult immunity caused by some causes serious decline, susceptible to mold mycobacterium Certain bacteria such as salmonella infection[6] .These patients we reported just like the Vietnamese, americans RuanJin, reported by Brown, had long-term fever again and again and even systemic mixed infection. It caused the condition to repeat, just like having pulmonary tuberculosis. But the mycobacterium tuberculosis and HIV was negative after repeat check. The case we reported were in early onset, there was a pain on the right side of the knee joint. Whether it is early bone infection, it remains to be fastidious.

Postscript Note: The patient had a high fever and respiratory airway infection again after half a year, and was admitted by our hospital. But he was die after a month because of systemic multiple organ failure.

References

1. Brown e, S. K.; Burbelo, P. D.; Chetchotisakd, P.; Suputtamongkol, Y.; Kiertiburanakul, S.; Shaw, P. A.; Kirk, J. L.; Jutivorakool, K. et al. (2012). "Adult–Onset Immunodeficiency in Thailand and Taiwan". New England Journal of Medicine 367 (8): 725–734.

2. Marilynn Marchione (2012–08–22). "New immune–system disease found in Asians; causes AIDS –like symptoms in people without HIV". The Washington Post.

3. "New AIDS –like mystery disease". The Voice of Russia. 2012–08–22.

4. "AIDS 2.0: Highly contagious disease spreading in China". The Swash. 2012–08–22.

5. Kent Sepkowitz (2012 –08 –22). "New Thai –Taiwanese Syndrome Is Not AIDS 2.0". The Daily Beast.

6. "Adult –onset immunodeficiency syndrome". Wikipedia.2012–09–15.