Clinical Pathology Conference

September 5, 2014

Name of the patient: Mr. Cxx
Chart Number: 2xxxxxxx
Date of admission: 2012/08/31
Date of discharge: 2012/09/29

Presented by :感染科 李明勳醫師
Discussed by：影像診療科 張志丞醫師
檢驗醫學科 盧章智醫師
耳鼻喉科 方谷豪醫師
病理科 黃彥霖
Moderator：解剖病理科 孫建峰醫師

Chief complaint: Progressive swelling of bilateral neck for about 2 months

Present illness:

This 28-year-old male patient was diagnosed with AIDS at Mackay Hospital-Hsinchu in March 2009 when he received treatment for *Pneumocystis jirovecii* pneumonia (PJP). He was transferred to our hospital in April 2009 and was discharged from hospital in May 2009. He was lost to follow-up after the first visit to our Infectious Diseases (ID) OPD and went to the National Taiwan University Hospital- Hsinchu for further follow-up. However, soon he did not go back there.

He used to be well until two months prior to this admission when his neck became swollen and neck lumps or masses were enlarging and visible gradually. The neck masses were firm with mild tenderness. He had no fever, night sweats or respiratory symptoms, and he denied any recent animal contact or going abroad. However, he had a weight loss of about 4~5 kg in one month.

He visited our ENT OPD in July 2012. Head and neck CT was arranged and showed marked enlargement of the bilateral cervical nodes with nodal necrosis, considering TB adenitis, Kikuchi-Fujimoto disease, metastases or Rosai- Dorfman disease. Echo-guided FNA of right neck LN was performed on Aug. 10, 2012, and the cytology reported fungal infection with granulomatous inflammation. Thus, he was referred to our ID OPD and was arranged for admission on Aug. 31, 2012.

Past history

1. AIDS with *Pneumocystis jirovecii* pneumonia (PJP) diagnosed in March 2009 at 新竹馬偕; Transferred and admitted to 林口長庚 from 2009/04/06 to 2009/05/13

2. Left femoral fracture because of falling down from 2nd floor

3. Epilepsy with phenytoin since he was 15 years old

Personal history: denied drug abuse, no smoking, no alcohol drinking, no drug or food allergy

Physical examination

T:35.9℃ P:120/min R:20/min BP:143/105 mmHg 身高:162.2CM 體重:44KG

GENERAL APPEARANCE: Fair looking

CONSCIOUSNESS: Clear and oriented, E 4 V 5 M 6

HEENT: Sclerae: NOT icteric Conjunctivae: NOT pale
Oral cavity: Intact mucosa, no thrush

NECK: Supple and no jugular vein engorgement
Bilateral neck lymphadenopathy, including supraclavicular fossa, sized of lymph nodes from 1~5 cm in diameters, fixed, elastic with mild tenderness, erythema over left neck LNs

CHEST: Breathing sound: bilateral clear, No wheezing

HEART: Regular heart beat without audible murmur, No audible S3 or S4

ABDOMEN: Soft AND flat, No superficial vein engorgement
No tenderness; No rebounding pain, Bowel sound: normoactive

BACK: No knocking pain over bilateral flank area

EXTREMITIES: Freely movable, No pitting edema of bilateral legs

Laboratory findings:

(血液):

		20120901 06:33	20120903 06:58	20120910 07:10	20120913 17:54	20120920 06:50
WBC	1000/uL	2.9	3.5	2.6	3.6	2.2
RBC	million/	2.88	2.96	2.49	2.85	1.76
Hemoglobin	g/dL	8.3	8.7	7.5	8.7	5.5
Hematocrit	%	25.0	25.8	21.9	24.9	15.7
MCV	fL	86.8	87.2	88.0	87.4	89.2
MCH	pg/Cell	28.8	29.4	30.1	30.5	31.3
MCHC	gHb/dL	33.2	33.7	34.2	34.9	35.0
RDW	%	20.4	20.6	22.2	21.7	24.2
Platelets	1000/uL	227	238	221	196	218
Segment	%	65.4	76.5	75.6	85.9	81.7
Lymphocyte	%	23.6	14.3	15.1	8.3	13.8
Monocyte	%	8.9	7.2	8.5	5.5	3.6
Eosinophil	%	2.1	1.7	0.4	0.3	0.9
Basophil	%	0.0	0.3	0.4	0.0	0.0

		20120922 06:41	20120925 23:53	20120929 06:58
WBC	1000/uL	1.6	1.8	1.4
RBC	million/	2.63	3.16	3.16
Hemoglobin	g/dL	8.2	9.6	9.4
Hematocrit	%	23.2	28.1	27.7
MCV	fL	88.2	88.9	87.7
MCH	pg/Cell	31.2	30.4	29.7
MCHC	gHb/dL	35.3	34.2	33.9
RDW	%	19.7	17.6	17.3
Platelets	1000/uL	164	199	187
Segment	%	84.0	81.0	62.0
Band	%	1.0		1.0
Lymphocyte	%	7.0	12.0	23.0
Monocyte	%	6.0	7.0	12.0
Eosinophil	%	1.0	0.0	2.0
Basophil	%	1.0	0.0	0.0

20140903 Serology data

CMV-AG (B)		Negative
ABSOL-CD4	cells/uL	4.00
ABSOL-CD8	cells/uL	194.0
CD4/CD8		0.02
CD4 T Cell	%	0.76
CD8 T Cell	%	38.8
HIV-RNA-QT	copies/mL	43,355
RPR/TPPA		Nonreactive/Nonreactive
EB-VCA IgG	U/mL	Positive > 750.0
EB-VCAM	U/mL	Negative < 10.0
CRYPAG		Negative
EBEA-Ab	U/mL	1:40 (+)
EBNA-Ab	U/mL	Positive 285.0

(生化):						
	20120901	20120908	20120910	20120913	20120920	20120925
HBsAg		Nonreactive 0.85				
Anti-HBs		Negative 9.91				
CMV-IgG		Reactive 980.30				
CMV-IgM		Nonreactive 0.19				
β2-Microgl			3211			
Albumin			3.41			
Creatinine			0.44			
AST/GOT			13			
ALT/GPT			8			
ALK-P			79			
Total Bil			0.6			
LDH			208			
Sugar	85				95	
BUN	7.3			9.7		
Creatinine	0.41			0.37	0.95	0.47
Total				0.6		
AST/GOT	20					
ALT/GPT	10			16		
ALK-P	91					
Na(Sodium)			140	133	137	134
K(Potassiu			3.4	3.2	3.1	3.4
Mg(Magnesi			1.9	1.5		
Anti-HCV			Nonreactive 0.12			

Image findings – To be presented

Course and Treatment:

After admission, echo-guided biopsy for the patient's neck lymphadenopathy was arranged on 2012/9/3. A follow-up head and neck CT including abdomen and pelvis was arranged on 9/7 and showed lymphadenopathy over bilateral neck and para-aortic areas. His blood CD4 T-cell count was 4/μL and HIV-RNA viral load was 43,355 copies/mL. The combined anti-retroviral therapy (cART) was started with combivir (zidovudine + lamivudine) and efavirenz on 2012/9/3. Antifungal therapy with oral itraconazole was used from 9/6 to 9/8 under the suspicion of histoplasmosis or penicillosis, and was shifted to amphotericin B on 9/9 according to the pathology and the fungal culture reports. Oral baktar was given for PJP prophylaxis.

Fever developed on 9/13 and persisted during amphotericin B use despite premedication with vena or solucortef. Severe anemia and profound leukopenia with increased serum creatinine level were found as well. Amph. B or baktar side

effect was suspected. We tapered the dosage of Baktar from 2#QD to 1#QD and shifted amph B to liposomal amph B on 9/21. Fever subsided then. We shifted liposomal amph B to micafungin and itraconazole on 9/23 for his persistent leukopenia and anemia. Combivir was shifted to kivexa for it could cause anemia and leukopenia as well. As the slow regression of his cervical lymphadenopathy, we extended the antifungal therapy with combination of micafungin and itraconazole till 9/29. Although he still had leukopenia and anemia, his condition was stable without fever. We let him go home on 9/29 with the home medication, including itraconazole (200 mg twice a day), kivexa and efavirenz. He is still alive and lives well now.