

1)

### (Lactic Acidosis)

· · · · ·  
· \* · † ·

1

, SIADH

: , 31

1)

:

: 4

2.

가 가

(diffuse large and small cell) (cyclophosphamide, adriamycin, oncovin, prednisolone, etoposide) 13

가 4-5mEq/L

2

가 pH 7.35

(etoposide, cisplatin, arabinoside-C) 4 , methotrexate

3.

2가

(BCNU, etoposide, arabinoside- C, melphalan)

. A

가

B

, phenformin

1

3 (ifosphamide, neoplatin, etoposide) IL-2

가

4.

. 6

가

methotrexate, arabinoside- C

. B

. 2

, 5-7, 8 9, 10, 11, 12

가

(ALL- L1)

가

(prednisolone, arabinoside- C, mitoxantrone, etoposide)

20

가

5

: 10,400/mm<sup>3</sup> .  
 가 : 102mg/dl, BUN 7.6mg/dl, Cr 1.3mg/dl ,  
 : 130/80mmHg, 0.3mg/dl, AST 41IU/L, ALT  
 80 / , 18 / , 36.5 . 41IU/L . Na 139mEq/L, K  
 3.5mEq/L, Cl 100mEq/L, tCO<sub>2</sub> content 22mEq/L  
 . 가  
 , tCO<sub>2</sub> content (Fig. 1). 13  
 가 pH 7.216, pCO<sub>2</sub> 21.4mmHg,  
 pO<sub>2</sub> 113.6mmHg .  
 90mg/dl, BUN 35.1mg/dl, Cr  
 1.4mg/dl , 0.5mg/dl,  
 : 7.8, AST 55IU/L, ALT 55IU/L Na 141mEq/L,  
 g/dl, 22.7%, 62,000/mm<sup>3</sup> K 3.2mEq/L, Cl 105mEq/L, tCO<sub>2</sub> content 9mEq/L  
 8mmol/L . 15  
 , Na 144mEq/L,  
 K 3.1mEq/L, Cl 112mEq/L, tCO<sub>2</sub> content 19mEq/L  
 . 11  
 1.4mmol/L .  
 11  
 : X-  
 가  
 X-  
 (Fig. 2).

**Fig. 1.** Course of patient's lactic acidosis and effect of antileukemic chemotherapy.

**Fig. 2.** Chest roentgenograms on admission and 1 day before antileukemic chemotherapy show improvement during the course.

(Fig. 3). : , hypae 15  
80%  
ALL L1 (Fig. 4).  
:  
, X-  
5  
10 itraconazole  
. 12  
. 15  
가  
17 (6-mercaptopurine, vincristine, ara-  
binoside-C, cyclophosphamide, methotre-  
xate)  
가  
.  
(lactic acid)  
(dead-end)  
가 가  
.  
(glycolysis) NADPH  
, , ATP NADH NAD  
.  
ATP NAD  
, , 1500mmol  
.  
mmol  
가 13 14.  
, pH 7.35  
, 가 4-5mmol/L

**Fig. 3.** Abdominal ultrasonography shows multifocal low density lesions at left kidney.

**Fig. 4.** A bone marrow aspiration taken on admission day 15. This bone marrow aspirate shows L-1 lymphoblast that are moderately uniform in size (Wright-Giemsa,  $\times 400$ ).

3).  
 A, B 가 . A  
 , ,  
 B  
 가  
 , , , 4).  
 가  
 , , , 1-2  
 , , ,  
 A 15).  
 1961 4) 1963 가  
 B 16).  
 , 가 , 가 20).  
 , , ,  
 2  
 X-ray  
 12 X-ray  
 , , ,  
 가  
 가  
 가  
 acetoacetate, -hydroxybutyrate가  
 acetoacetate  
 - hydroxybutyrate  
 가 가  
 17),  
 가 (glucone-  
 18),  
 19)가  
 PT가  
 AST, ALT

= Abstract =

**Lactic Acidosis Associated with Acute Lymphoblastic Leukemia**

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Occurrence of lactic acidosis with adequate tissue oxygenation (type B lactic acidosis) has been described in association with leukemia, lymphoma, small cell carcinoma and breast cancer. However, no such case has been reported in Korea. Therefore, we report a case of type B lactic acidosis in a man with rapidly progressing acute lymphoblastic leukemia which had been transformed from lymphoma.

**Key Words :** Type B lactic acidosis, Leukemia

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