

1

Streptococcal Toxic Shock Syndrome Associated with Intrauterine Fetal Death - A Case Report -

Soo Youn Lee, M.D., Jung Soo Lee, M.D., Mi Ae Lee, M.D.,
Wha Soon Chung, M.D. and Seon Ju Kim, M.D.*

*Department of Clinical Pathology, College of Medicine, Ewha Womans University, Seoul, Korea and
Department of Clinical Pathology, Gyeongsang National University School of Medicine,
Chinju, Korea**

The group A streptococcus is capable of producing exotoxins that have been linked to a toxic shock-like syndrome. Streptococcal toxic shock syndrome is a rapidly progressive associated with injury to multiple organ systems and a 30-60% mortality rate. These cases are very rare in Korea. We present a case of 32-year-old pregnant woman who developed streptococcal toxic shock syndrome following intrauterine fetal death. She manifested hypotension, shock, increased level of creatinine, disseminated intravascular coagulopathy, liver impairment, renal failure, pulmonary edema and adult respiratory distress syndrome. Blood cultures yielded *Streptococcus pyogenes*. After 17 hours on admission, she died in spite of massive transfusion, antibiotics therapy and ventilatory support. Clinicians should be alert to the importance of early diagnosis and treatment of this lethal infection.

Key words : Streptococcal toxic shock syndrome, Intrauterine fetal death, *Streptococcus pyogenes*

(pyogenic exotoxin) A, B, C M 1,
3, 12, 18 , ,

A , 가 , (streptococcal toxic shock syndrome) [1-3] .
(staphylococcal toxic shock syndrome)

:
(158-710) 911-1

Tel : 650-5222, 5030 Fax : 654-7948

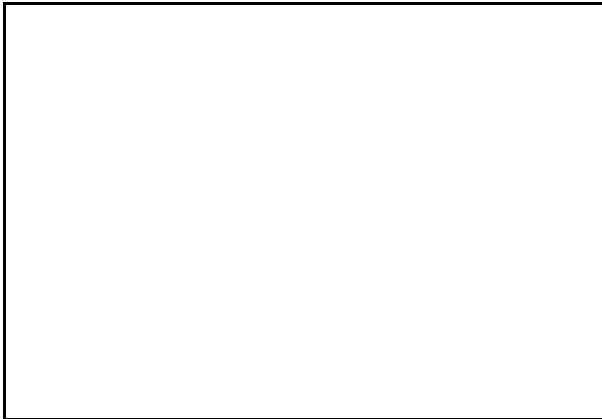


Fig. 1. The chest radiography reveals bilateral and maximal in the peripheral region fading towards the periphery of the lobes, suggesting pulmonary edema.

A 가 [4,5].

32 1 .

: 32
: 3 , 3 ,
:33

가

: 90/60 mmHg, 156 / ,
38.1 .

가

.
:
6.2x10⁹/L (64%, 25%,
11%), 56x10⁹/L PT,
PTT 가 FDP 20 μ g/mL ,
D-dimer 1.0 μ g/mL .
aspartate transferase (AST) 100 IU/L, alanine aminotransferase
(ALT) 71 IU/L, alkaline phosphatase (ALP) 271 IU/L
urea nitrogen (BUN) 17 mg/dL, creatinine 2.6 mg/dL,
phosphorus 10.4 mg/dL 가 . Total bilirubin
0.7mg/dL . Na 158 mg/dL,
K 3.8 mg/dL Na 167 mg/dL, K 4.0
mg/dL . 3.1 mg/dL, 2.4 mg/dL,
2.0 mg/dL cholesterol,

가
pH 6.8, pCO₂ 63.8 mmHg, pO₂ 22.3 mmHg .
4+, glucose 1+, nitrate 1+, WBC 1+, UBG 3+,
bilirubin 2+, blood 3+, many/HPF,
3-5/HPF, 11-20/HPF,
3-5/HPF 3 *S. pyogenes*
T T3/B3264 .
:
3
(Fig. 1)
5
amniotomy amikacin, metro-
nidazole
17 .

A , 가 ,
, , , ,
, , ,
.
1978 Todd[6] tampon
가
1987 Cone [1] Barrter [2]
(toxic shock syndrome)
A 가 1940 A
가 [7].
, ,
.
24 , creatinine 가,
, , , ,
,
30-60%
[8].
, , creatinine level
가, , ,

A

30-60%

32

가

, , creatinine

3

17

가

1. Cone LA, Woodard DR, Schlievert PM, Tomory GS. *Clinical and bacteriological observation of a toxic shock-like syndrome due to Streptococcus pyogenes. N Engl J Med.* 1987;317:146-9.
2. Bartter T, Dascal A, Carroll K, Curley FJ. *Toxic shock syndrome. Arch Intern Med.* 1988;148:1421-4.
3. Silver RM, Heddleston LN, McGregor JA, Gibbs RS. *Life threatening puerperal infection due to group A streptococci. Obstet Gynecol* 1992;79:894-6.
4. , , , , .
Streptococcus pyogenes
2 . 1996;28:185-90.

5. , , , , , , ,

2 . 1990;39:3:395-401.

6. Todd J, Fishaut M, Kapral F, Welch T. *Toxic-shock syndrome associated with phage-group A1 staphylococci. Lancet* 1978;2:1116-8.
7. Stollerman GH. *Changing group A streptococci; Reappearance of streptococcal toxic shock. Arch Intern Med* 1988; 148:1268-70.
8. The Working Group on Severe Streptococcal infections. *Defining the group A Streptococcal toxic shock syndrome; Rationale and consensus definition. JAMA* 1993;269:3:390-1.
9. Hoge CW, Sachwartz B, Talkington DF, Breiman RF, MacNeil EM, Eglender SJ. *The changing epidemiology of invasive group A streptococcal infections and emergency of streptococcal toxic-shock like syndrome:a retrospective population based study. JAMA.* 1993;269: 384-9.
10. Willoughby R and Greenburg RN. *The toxic shock syndrome and streptococcal pyogenic exotoxin. Ann Intern Med* 1983;98:559.
11. Whitted RW, Yomans ER, Hankins LDV. *Group A streptococcus as a cause of toxic shock syndrme. J. Reprod Med.* 1990;335:558-60.
12. Dotters DJ and Kats VL. *Streptococcal toxic shock associated with septic abortion. Obstet Gynecol* 1991; 78:549-50.
13. Stevens DL, Tanner MH, Winship J, Swarts R, Ries KM, Schlivert PM, Kaplan E. *Severe group A streptococcal infections associated with a toxic shock-like syndrome and scalet fever toxin A. N Engl J Med* 1989;321:1-7.
14. Wood TF, Potter MA, Jonasson O. *Streptococcal Toxic shock-like syndrme. Ann of surgery* 1993;2:104-9.