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□ 원 저 □

Henoch-Schönlein Purpura

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= Abstract =

Clinical Manifestations of Korean Adult Patients with Henoch-Schönlein Purpura

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Objective: We investigated the clinical data and analyzed the significant prognostic factors for outcomes in Korean adult patients with Henoch-Schönlein Purpura (HSP).

Methods: We retrospectively reviewed the medical records of 52 patients over 20 years-old, who visited the Yonsei University Severance Hospital from December 1999 to November 2009, and fulfilled the classification criteria for HSP. We investigated the epidemiologic data, clinical features, renal biopsy findings, laboratory results and disease outcomes.

Results: The median age was 43.5 (20～83) years old and 29 out of 52 patients (55.8%) were male. HSP exhibited seasonal variation and most frequently developed in winter (42.3%), followed by spring (25.0%). Upper respiratory infection was the most common known preceding event for HSP development. Skin manifestations were observed in all subjects, followed by kidney (80.8%), gastro-intestine (57.7%) and joints (26.9%). After a median follow-up period 14.5 (1～227) months, 12 patients experienced HSP relapse (23.1%), and 7 patients had chronic renal failure (13.4%). Univariate analysis showed that renal insufficiency (p=0.002) and nephritic syndrome (p=0.026) at diagnosis were significantly related to the development of chronic renal failure. Of the two parameters, only initial renal insufficiency was found to be a significant predictive value for chronic renal failure (OR=28.7, p=0.001, 95% confidential interval 3.6～225.3).

Conclusion: Renal insufficiency at diagnosis may be a useful predictive factor for progression

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to chronic renal failure in Korean adult patients with HSP.

Key Words: Henoch-Schönlein Purpura, Adult, Clinical manifestation, Prognosis, Chronic renal failure

서 론

Henoch-Schönlein purpura (HSP) IgA

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Blanco 103 38

HSP ,

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(4). Garcia-Porrua 28 HSP

5.5

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(10). Garcia-Porrua

HSP 73 31 21

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① , ② IgA IgA , ③ , ④ ( ) HSP .

4 ① 20 , ② , ③ , ④ 2 (18), HSP , 20 20 . EULAR/PRINTO/PReS criteria , HSP .

2) **임상적 특성**

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3) **신장 침범**

. ① : >5 RBC/HPF, ② : >1,500 RBC/HPF, ③ : 300 mg/day , 3.5 g/day , ④ : >3.5 g/day, <3 g/dL, , ⑤ (renal insufficiency): Modification of Diet in Renal Disease (MDRD) 60 mL/min/1.73 m^2 .

4) **관절 침범**

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5) **검사실 소견**

, (ESR), C- (CRP), IgA , , ; ① : WBC >11,000/mm^3, ② : Hb <13 g/dL, Hb <12 g/dL, ③ : platelet < 150,000/mm^3, ④ ESR : >20 mm/hour, ⑤ CRP : >8 mg/dL, ⑥ IgA : >400 mg/dL. International Study of Kidney Disease in Children (ISKDC) 6 (19).

6) **예후 분석**

(complete recovery), (relapse) , , (chronic renal failure) . , 1 . MDRD 60 mL/min/1.73 m^2 3 , .

3. **통계 분석**

SPSS 12.0 (SPSS Inc., Chicago, USA) . HSP chi-square test Fisher's exact test p 0.2 . multiple logistic regression , (forward selection) . p 0.05 .

결 과

1. **임상적 특성**

29 , 23 : 1.26 : 1 , 43.5 20 83 . (22 : 42.3%), (13 : 25%), (11 : 21.2%), (6 : 11.5%) . 13 (25%)

Table 1. Clinical and demographic characteristics of 52 adults with HSP

	Patients (N=52)
Sex (%)	
Male	29 (55.8)
Female	23 (44.2)
Median age (year)	43.5 (20～83)
Season of initial presentation (%)	
Spring	13 (25.0)
Summer	11 (21.2)
Autumn	6 (11.5)
Winter	22 (42.3)
Predisposing factor (%)	
URI	13 (25.0)
Drug	6 (11.5)
Tumor	5 (9.6)
Pancreatitis	1 (1.9)
Food poisoning	1 (1.9)
Unknown	26 (50.0)
Hypertension (%)	
Yes	19 (36.5)
No	33 (63.5)

URI: upper respiratory infection

Table 2. Clinical features of 52 adults with HSP

	Patients (%)
Skin manifestations	52 (100.0)
Lower extremities only	25 (48.1)
Lower and upper extremities	14 (26.9)
Lower extremities and trunk	3 (5.8)
Lower and upper extremities and trunk	10 (19.2)
Joint manifestations	14 (26.9)
Monoarthritis	3 (5.8)
Oligoarthritis	9 (17.3)
Polyarthritis	2 (3.8)
GI manifestations	30 (57.7)
Abdominal discomfort	4 (7.7)
Abdominal pain	26 (50)
Diarrhea	7 (13.5)
Hematochezia	9 (17.3)
Renal manifestations	42 (80.8)
Microscopic hematuria	38 (73.1)
Gross hematuria	5 (9.6)
Nonnephrotic range prot	7

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4) **신장 침범**

38 (73.1%) , 5
(9.6%),
21 (40.4%), 6 (11.5%), 6 (11.5%)
.

23 (44.2%) , grade III
15 (65.2%) , grade II 5 (21.7%),
grade I, IV 2 (8.7%), 1 (4.3%)
, grade V, VI (3).

5) **검사실 소견**

19 (36.5%),
17 (32.7%), 2 (3.8%)
, ESR 24 (60.0%), CRP 28
(63.6%), IgA 12 (29.3%) (4).

Table 3. Renal biopsy findings of 23 adults with HSP nephritis

Grade	Patients (%)
I	2 (8.7)
II	5 (21.7)
III	15 (65.2)
IV	1 (4.3)
V	0 (0)
VI	0 (0)

Renal biopsy findings were classified into one of six subtypes by the classification of international study of kidney disease in children (ISKDC)

3. 치료

30
(57.7%) , 2 ,
14 ,
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5
, 4 azathioprine, 1 cyclophosphamide .
, 1
, ,
grade III ,
. 1
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grade
III , , ,
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Table 4. Laboratory findings of 52 adults with HSP

	Patients (%)
Leukocytosis	19/52 (36.5)
Anemia	17/52 (32.7)
Thrombocytopenia	2/52 (3.8)
Increased ESR	24/40 (60.0)
Increased CRP	28/44 (63.6)
Increased IgA	12/41 (29.3)

ESR: erythrocyte sediment rate, CRP: C-reactive protein

Table 5. Outcome of 52 adults with HSP at last follow up

Follow up months	Months
Mean	33.5 ± 40.8
Median	14.5
Range	1～227
Outcome	Patients (%)
Complete recovery	19 (36.6)
Relapse	12 (23.1)
Persistent hematuria or proteinuria	26 (50.0)
Chronic renal failure	7 (13.4)

4. 경과 및 예후

33.5±40.8

, 1 227 .

Table 6. Univariate& multivariate analysis of factors associated with chronic renal failure

Factors	N (%)	p
Sex		
Male	5/29 (17.2)	
Female	2/23 (8.7)	0.444
Age (year)		
≤50	2/30 (6.7)	
＞50	5/22 (22.7)	0.119
Hypertension		
No	3/33 (9.1)	
Yes	4/19 (21.1)	0.4
Arthralgia		
No	7/38 (18.4)	
Yes	0/14 (0.0)	0.169
GI involvement		
No	4/22 (18.2)	
Yes	3/30 (10.0)	0.438
Leukocytosis		
No	5/33 (15.2)	
Yes	2/19 (10.5)	1.0
Anemia		
No	3/35 (8.6)	
Yes	4/17 (23.5)	0.198
Thrombocytopenia		
No	7/50 (14.0)	
Yes	0/2 (0.0)	1.0
Immunosuppressant		
No	2/22 (9.1)	
Yes	5/30 (16.7)	0.685
Hematruria		
No	0/9 (0.0)	
Yes	7/43 (16.3)	0.331
Proteinuria		
No	1/25 (4.0)	
Yes	6/27 (22.2)	0.101
Renal insufficiency		
No	3/46 (6.5)	
Yes	4/6 (66.7)	0.002*
Nephrotic syndrome		
No	4/46 (8.7)	
Yes	3/6 (50.0)	0.026*

*p＜0.05

12 (23.1%) .

19 (36.6%),

26 (50%),

7 (13.4%) (5).

7 2

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5. 신장침범 예후와 관련된 인자 분석

, ,

. HSP

(p=0.002) (p=0.026)

(6).

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(OR=28.7, p=0.001, 95% CI=3.6～225.3)(7).

고 찰

HSP IgA

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100,000 1.3

(20), .

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(4,10,11,13,15,16,21,22),

(12,14,23).

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Table 7. Multivariate analysis of factors associated with chronic renal failure

Factors	OR (95% CI)	p
Renal insufficiency	28.7 (3.6～225.3)	0.001*

*Multiple logistic regression by forward selection method
CI: confidence interval, OR: odd ratio

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(23). ,
Kwon (14), Hong (39).
(13) Kim (15) 48～
. 85.7% (4,10-12,37,40), 42～77.8%
(23), (13-16), 57.7% .
(12), (4,
11). 70～100% , 27～
(9,24), 50% (10-12,37).
(9) 86.7% (26/30), 30% (9/30)
(9) . .
hepatitis B (25), parvovirus B19 (26), Staphylococcus HSP ,
(27), Streptococcus species (28) , 20～28% 70～80%
(29,30), (29,31,32), IgA 1
(33-35) IgA (22), 30～80%
, HSP (6), 80.8%
, quinolone, clarithromycin . Blanco
(36). 21.8
, 89.2%
25% , (4).
, Garrica-Porrua
11.5%, 9.6% 10%
, 40% 10%
. (10). Pillebout
HSP HSP 250 15
. Kwon 20%
(14), 27% , 11%
(10,11,37), (37). Coppo HSP 136
58% 83 1
(38), 4.8%
, 51.9% 10.3% ,
. 7.2%, 13.2%
55～64% (22). Kim HSP
(10-12,37), 15～48% 81 25
(13-16), 26.9% . 3.7%, 4%
, ,
. Pillebout (15), Hong 149 ,
(37), Kwon 38 , 18 30.9%,
(14),

60.5%, 83.3%
, 19.6%, 26.1%, 0%, 0%, 4.3%, 13.3%
(13). Kim HSP 81 32.1% , 22.2% (16). 13.4% .

HSP , , .

. Pillebout 1.2 mg/dL , , interstitial fibrosis, glomerular fibrinoid necrosis, glomerular sclerosis (37). Coppo , ,

(22). . Kim ,

(16). Pillebout 1.2 mg/dL (37), Kim (16)

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grade grade . 23 (44.2%) , .

HSP , , (13-16). Hong 20 (13) 15 (14-16). 20 52 , . , , , . HSP . HSP HSP .

결 론

HSP , . HSP , , , .

. HSP , .

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