

# 우리나라의 삼일열 말라리아 현황

## Status of Vivax Malaria in the Republic of Korea

가

1 1198

Jae - Won Park, M.D.

Department of Microbiology

Gachon Medical School

E - mail : seorak@dreamwiz.com

### Abstract

Vivax malaria reemerged in the Republic of Korea in 1993. The number of cases of vivax malaria had increased annually until 2000; however, it has decreased constantly since 2001. During the early years after the reemergence, most of the cases occurred among soldiers especially in the region adjacent to the Demilitarized Zone until 1995; however, since 2001, civilian cases have accounted for approximately a half of total cases, also occurring in the neighbor counties of Seoul. Local transmission within the Republic of Korea was already done before the year of 2000. The current status of vivax malaria appears to be in a subsiding phase; however, continuous attentions are needed to prevent further spreading of malaria.

**Keywords :** Vivax malaria; The Republic of Korea; Reemergence

: ; ;

1993 19,000

가 2000 4,000

가 2001

1,100 가

(genus *Plasmodium*)

4 , (*Plasmodium vivax*),

(*P. falciparum*), (*P. malariae*)

(*P. ovale*)

(1).

. 가

(sporozoite)

(merozoite)

(tissue

schizont) 가 , 가  
 가 ( , pre- 가  
 erythrocytic cycle). 가  
 (trophozoite), (schizont) .

48 , 3  
 (gametocyte)가 .  
 ( , erythrocytic cycle)(1). 가 가  
 가 가  
 (hypnozoite) 가 ,  
 가 .  
 가  
 (brady - sporozoite)  
 (tachy - sporozoite) 가 (2).  
 (2). ,  
 (relapse) MHC II가 .  
 T  
 (chloroquine) . CD4<sup>+</sup> CD25<sup>+</sup> T  
 T  
 T (T<sub>reg</sub>) .  
 (primaquine) T  
 (3).  
 , , ,  
 , , .

가

10 가 (7, 8) 가

, 1 가 , 가 (9, 10).

1 가 가

가 (4).

. 1960

가 . ,

, 1979

가

가

가 , 1.

가 1993 가 가

2000 4,000 ( 1).

1998 가

1997 1,000 가

. 2000

30% (11,

, , , , 15).

, , 가 , 1997

15 (1420 )

16 (1526 ) (5).

Hasegawa가 가 (14). 가

(6). 가 가

, 2001 2002

*P. vivax*

1.

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
	1	18	88	287	1,155	1,655	1,085	1,288	673	425	282	6,957
	0	1	12	25	207	1,127	996	1,273	755	468	276	5,140
	0	2	7	46	361	1,148	1,541	1,580	1,112	864	602	7,263
	1	21	107	358	1,723	3,930	3,622	4,141	2,540	1,757	1,160	19,360

2.

cation).

가

가

가

3.

가

1999

가

1996

가

가

가

1997

(11).

1999

가

, 2001

가

(14,

가

15).

( 1).

가

(13, 15).

1998

3, 4

가

8

30 km

가

2000

가

6

(11).

2000

(local transmission)가

4 ~ 10

3

가

(personal communi-

가

5

8 ~ 12

8

가

6 ~ 8

가

가

4.

1980

10

가 1993

2000

가

1997

가

16,000

가

2002 140,000 (not published data).

2000 6

5

5

60,000

가

1999

40%

(not published data).

가

2003

가

가

1990

가

2000 3,000 ~ 4,000

가

1. , , 1996 : 396 - 413

2. Herbert MG, David AW. Bruce - Chwatt's essential malariology. 3rd ed. Arnold, 1993 : 192 - 5

3. Hisaeda H, Maekawa Y, Iwakawa D, Okada H, Himeno K, Yasutomo K, et al. Escape of malaria parasites from host immunity requires CD4<sup>+</sup>CD25<sup>+</sup> regulatory T cells. Nat Med 2004 ; 10 : 29 - 30

4. World Health Organization. World malaria situation. Wkly Rec

- 1997 ; 72 : 269 - 76
5. , 1975 : 28 - 34
6. Hasegawa Y. Malaria in Korea. J Chosen Med Soc 1913 ; 4 : 53 - 69
7. Himeno K. Malaria occurring at Gangnung area, Gangwondo. Mansen Noikai 1926 ; 62 : 59 - 66
8. Kobayashi H. Review on malaria and Anopheles in Korea. J Chosen Med Soc 1932 ; 22 : 107 - 11
9. Hale TR, Halpenny GW. Malaria in Korean veterans. Canad M A J 1953 ; 68 : 444
10. Hankey DD, Joner R, Coatney GR, Alving As, Coker WG, Donovan WN, et al. Korean vivax malaria I. Natural history and response to chloroquine. Am J Trop Med Hyg 1953 ; 2 : 958 - 69
11. Park JW, Klein TA, Lee HC, Pacha LA, Ryu SH, Oh MD, et al. Vivax malaria : A continuing health threat to the Republic of Korea. Am J Trop Med Hyg 2003 ; 69 : 159 - 67
12. , 1999 , 2000 ; 32 : 335 - 9
13. , 2000 , 2001 ; 33 : 280 - 4
14. , 2001 , 2002 ; 34 : 267 - 75
15. , 2002 , 2003 ; 35 : 385 - 92

## 5 ( )

- |    |     |
|----|-----|
| 1. | 6.  |
| 2. | 7.  |
| 3. | 8.  |
| 4. | 9.  |
| 5. | 10. |