



## The Report on the Medical Voluntary Activities for Cleft Lip and Palate in Vietnam by the Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

Tae-Hoon Hahm<sup>1</sup>, Hyo-Keun Shin<sup>2</sup>, Jong-Ryul Kim<sup>3</sup>,  
Dong-Mok Ryu<sup>4</sup>, Sun-Youl Ryu<sup>5</sup>, Kyoung-Won Kim<sup>6</sup>,  
Young-Wook Park<sup>7</sup>, Young-Soo Jung<sup>1\*</sup>

*Dept. of Oral and Maxillofacial Surgery, College of Dentistry, Yonsei University<sup>1</sup>,  
Dept. of Oral and Maxillofacial Surgery, College of Dentistry, Chonbuk National University<sup>2</sup>, Dept. of Oral and Maxillofacial Surgery, On Hospital<sup>3</sup>, Dept. of Oral and Maxillofacial Surgery, College of Dentistry, Kyung-Hee University<sup>4</sup>, Dept. of Oral and Maxillofacial Surgery, College of Dentistry, Chonnam National University<sup>5</sup>,  
Dept. of Oral and Maxillofacial Surgery, College of Medicine and Medical Research Institute, Chungbuk National University<sup>6</sup>, Dept. of Oral and Maxillofacial Surgery, College of Dentistry, Kangnung National University<sup>7</sup>*

### ABSTRACT

## 대한악안면성형재건외과학회(KAMPRS)의 베트남 구순구개열 무료 의료 봉사 활동에 관한 보고

함태훈<sup>1</sup>, 신효근<sup>2</sup>, 김종렬<sup>3</sup>, 류동목<sup>4</sup>, 유선열<sup>5</sup>, 김경원<sup>6</sup>, 박영욱<sup>7</sup>, 정영수<sup>1\*</sup>

연세대학교 치과대학 구강악안면외과학교실<sup>1</sup>, 전북대학교 치과대학 구강악안면외과학교실<sup>2</sup>, 온종합병원 구강악안면외과<sup>3</sup>, 경희대학교 치과대학 구강악안면외과학교실<sup>4</sup>, 전남대학교 치과대학 구강악안면외과학교실<sup>5</sup>, 충북대학교 의과대학 구강악안면외과학교실<sup>6</sup>, 강릉원주대학교 치과대학 구강악안면외과학교실<sup>7</sup>

대한악안면성형재건외과학회는 2004년도부터 매년 인도적 차원에서 의료 환경이 낙후된 Vietnam의 cleft lip and palate 환자들을 치료하기 위해 무료로 해외 진료 봉사 활동을 해왔다. 초창기 해외 진료 봉사 활동 당시 베트남 의료 기술 발달이 미비하여 준비해야 할 것들이 많았으나 이 후 베트남의 경제 발전과 함께 의료 시설 및 의료 기술이 발달함에 따라 준비 품목 등이 간단명료해지고 현지 지원 및 수술 준비도 원활히 진행되었다. 이러한 무료 의료 봉사 활동을 계기로 개발도상국의 낙후된 의료 시설 및 의료 기술 발전, 의료 혜택을 받지 못한 구순 구개열 환자의 정상적 안모 및 기능 회복, 조건 없는 의료 봉사 활동을 통한 민간외교 효과 및 양국간의 우호 증진 등의 성과가 있었다. 대한악안면성형재건외과학회에서는 2009년도 역시 베트남 National Institute of Odonto-stomatology 에서 11월17일부터 26일까지 cleft lip and palate 무료수술진료단(단장 신효근)을 보내 수술봉사 활동을 펼치고 돌아 왔다. 일반적인 구순구개열 뿐만 아니라 양측성 안면열(Bilateral Facial Cleft), 사경(Torticollis) 등의 희귀 기형을 포함하여 수술을 진행하였으며 총 31례의 수술을 성공적으로 마쳤으며 지난 6년 동안의 성과와 함께 이에 대한 보고를 하고자 한다.

**Key words:** 대한악안면성형재건외과학회, 베트남, 무료수술진료

## I. INTRODUCTION

Since 2004, the Korean association of maxillofacial plastic and reconstructive surgeons (KAMPRS) has participated in medical voluntary activities to treat cleft palate patients as a humanitarian effort in Vietnam. At the early stages of the medical voluntary activities, the Vietnamese medical technology fell short and the preparation for treatment was inadequate. However, economic growth, local support of medical facilities and technology are improving to allow smooth surgical preparation. The medical voluntary activities to a developing country contribute not only to the development of rural medical facilities and medical technology, but cleft palate patients receive medical benefits to recover aesthetics and function. These activities enhanced diplomatic relations among of the civilians.

The KAMPRS has sent an operation team of cleft lip and palate for voluntary service to the National Institute of Odonto-stomatology in Vietnam from 2004 to 2009. The 202 patients were treated by the medical volunteering team over last six years including the 47 cases of unilateral incomplete cleft lip, the 31 cases of unilateral complete cleft lip, the 15 cases of bilateral cleft lip, the 40 cases of incomplete cleft palate, the 57 cases of complete cleft palate, and the 11 cases of other operations. The treatment included not only the general cleft lip and palate, but also the disorders such as

bilateral facial cleft, torticollis, pharyngoplasty, palatal fistula closure, and so on. Thus, this report is to inform on the overall performance done over last six years by the medical volunteering team of cleft lip and palate by the KAMPRS including the result of operations done in 2009.

## II. MEDICAL VOLUNTARY TEAM AND MEDICAL VOLUNTARY ACTIVITES AREA

### 1. Medical voluntary team configuration (Table 1.)

The first medical voluntary team (Figure 1) in 2004 had a total of 15 people including Professor

Emeritus Byung-II Min who was the advisor, Dr. Hyo-Keun Shin who was the chair of the KAMPRS and a professor of Chonbuk University, Dr. Jong-Ryul Kim who was the team leader from Pusan University, totally



Figure 1. 2004 Vietnam medical volunteer groups.

**Table 1.** Medical voluntary activities period and contributor list by year, Hanoi, Viet Nam

Year	Period	The list of participants
2004	11/26 ~ 12/04	Byung-il Min, Hyo-Keun Shin, Jong-Ryul Kim, Kyoung-Won Kim, Jun-Woo Park, Dong-Mok Ryu, Sun-Youl Ryu, Young-Soo Jung, Jin-A Baek, Yeoung-Cheol Cho, Jun-Rae Lee, TH Kim, YJ Hwang, MW Park, MS Jung
2005	10/10 ~ 10/18	Byung-il Min, Hyo-Keun Shin, Jong-Ryul Kim, Kyoung-Won Kim, Young-Wook Park, Sun-Youl Ryu, Young-Soo Jung, Jin A Baek, June-Ho Byun, Moon-Ki Choi, JY Kang, SK Kim, HC Kim, SM Cha
2006	12/01 ~ 12/10	Byung-il Min, Myung-Jin Kim, Hyo-Keun Shin, Jong-Ryul Kim, young-Won Kim, Young-Wook Park, Sun-Youl Ryu, Young-Soo Jung, Hong-Ju Park, Chul-Hoon Kim, June-Ho Byun, Iel-Yong Sung, Sang-Jung Kim, HC Kim, MK Kim
2007	11/21 ~ 11/27	Hyo-Keun Shin, Jong-Ryul Kim, Young-Wook Park, Kyoung-Won Kim, Sun-Youl Ryu, Young-Soo Jung, Hong-Ju Park, Chul-Hoon Kim, HS Kim, KJ Jung, DH Kim, YD Choi
2008	11/21 ~ 11/29	Hyo-Keun Shin, Jong-Ryul Kim, Young-Wook Park, Kyoung-Won Kim, Sun-Youl Ryu, Hong-Ju Park, Bu Kyu Lee, JS Lim, SH Baek, JH Jung, DJ Seo, JH Huh, YB Kim
2009	11/17 ~ 11/26	Hyo-Keun Shin, Jong-Ryul Kim, Dong-Mok Ryu Sun-Youl Ryu, young-Won Kim, Young-Soo Jung, MS K, YR Kim, WW Song, SW Cho, TH Hahm, BS Kim

10 professors, 1 anesthesiologist, and 4 residents. In 2005, the team was a total of 11 professors and 3 residents. In 2006, the third team included a total of 15 volunteers including, Dr. Byung-Il Min as the advisor, Dr. Myung-Jin Kim as the chair of the KAMPRS, Dr. Hyo-Keun Shin as the team leader, other 10 professors and 2 residents. In 2007, the fourth team was a total of 12 volunteers including Dr. Hyo-Keun Shin as the team leader, Dr. Jong-Ryul Kim, the chair of the KAMPRS, 6 professors and 4 residents. In 2008, the fifth team had a total of 13 including 9 professors and 4 residents.

The 6th team in 2009 (Figure 2,3) had a total of 12 volunteers including Dr. Hyo-Keun Shin from Chonbuk University as the team leader, Dr. Dong-Mok Ryu from

Kyung-Hee University and the chair of the KAMPRS, Dr. Jong-Ryul Kim from Pusan University, Dr. Sun-Youl Ryu from Chonnam University, Dr. Kyoung-Won Kim from Chungbuk University and Dr. Young-Soo Jung from Yonsei university as the surgeon, Dr. Min-Soo Kwon from Seoul National University, Dr. Yong-Ran Kim from Kyung-Hee University, Dr. Won-Uk Song from Pusan University, Dr. Sung-Ung Cho from Dae-Jun Sun Hospital, Dr. Tae-Hoon Hahm from Yonsei University, and Dr. Bang-Shin Kim from Chonnam University. Local support included the scrub nurse, anesthesiologists, interpretation and the exchange surgeons from Vietnam actively contributed to proceed the surgeries.



**Figure 2.** 2009 Vietnam medical volunteer groups.



**Figure 3.** 2009 After the discussion with the Vietnamese Prime Minister.

## 2. Medical voluntary activities area

Between 2004 and 2009 for 6 years, the society volunteered in the Vietnam National University Hanoi Dental Hospital Institute of odonto-stomatology. This is the largest dental University Hospital in Northern Vietnam and contributes to student education. There are 50 employed doctors and 12 oral and maxillofacial surgeons. The 1st floor has the out-patient care clinics, the 2nd floor consists of the operating rooms, recovery room and intensive care unit, and the 3rd floor is equipped with hospital rooms. The hospital is able to independently conduct surgeries associated with facial fracture from traffic accidents. According to officials, by 2010, the hospital is planning to increase the number of operating rooms from 4 to 10 and build an 11 story building from the 5 story building right now.

## III. PATIENTS CARE AND SURGERY (Table 2)

The KAMPRS medical service team re-recruited patients with the help of the local hospital, the Institute of odonto-stomatology of Vietnam. During the 1st medical service in 2004 the team conducted a total of 28 cases including 16 primary cleft lip cases, and 11 cleft palate cases with 1 palatal fistula closure. During the 2nd service in 2005, the team was able to complete a total of 35 operations, 7 more cases than the previous year consisting of 15 primary cleft lips, 18 cleft palates and 2 secondary cheiloplasty. During the 3rd medical service in 2006, the team completed 34 procedures which included bilateral facial cleft surgeries. After 2007, the team had cases other than primary cleft lip and palate, including various facial deformities such as facial cleft and torticollis. Last year, the medical voluntary team re-recruited patients with a wide range of defects

**Table 2.** Patients care and surgery

Year	Cleft lip			Cleft palate		Other	Sum
	Unilateral		bilateral	Incomplete	Complete		
	Incomplete	Complete					
2004	7	6	3	5	6	1 <sup>a</sup>	28
2005	10	4	1	10	8	2 <sup>b</sup>	35
2006	7	7	1	6	12	1 <sup>c</sup>	34
2007	12	0	6	2	10	3 <sup>d</sup>	33
2008	7	7	2	13	10	2 <sup>e</sup>	41
2009	4	7	2	4	11	3 <sup>g</sup>	31
sum	47	31	15	40	57	11	202

a, b : Palatal fistular closure & secondary cheiloplasty, c : facial cleft, d : facial cleft, palatal fistula closure & cheiloplasty, e : facial cleft & pharyngoplasty, f : torticollis, facial cleft & scar revision.

from Northern Vietnam such as facial cleft, lymphangioma, torticollis, accessory jaw and postoperative facial defect.

However, due to the limitation of local health care environment, surgery equipment and restrictions, the team selected 31 patients with the consideration of the degree of seriousness of the illness, age, and risk for postoperative complications. The patient pool in 2009, had a male to female ratio of 15 to 16 and the age ranged from 6 months to 17 years old. Among of them, excluding the scar revision (10 years old), facial cleft (17 years old), and torticollis (6 years old), the mean age was 2.5 years old with predominantly cleft lip patients.

#### IV. CONCLUSIONS

During the first voluntary medical activities in 2004 the KAMPRS treated 28 cases

including palatal fistula closure and secondary cheiloplasty, since then has treated an average of 33 cases for 6 years. In addition to medical care, the officials of the local hospital invited the voluntary team for a welcome reception. Also, the Korean ambassador of Vietnam hosted a luncheon almost annually, displaying hospitality. This has developed into an exchange of culture and education where local hospital anesthesiologist or oral surgeons have come to Korea to get advanced training in medical technology.

In 2009, 31 cases were successfully completed in the Hanoi Institute of odonto-stomatology. In the last 6 years the medical voluntary team treated a total of 202 patients restoring their esthetics and function. During the visit in 2009, it was recognized that the Vietnamese medical facilities and technology has improved drastically. For example, the Vietnamese local staff was able to perform a unilateral

wide resection ameloblastoma with a fibula flap and reconstruct the jaw simultaneously. We believe that the KAMPRS medical voluntary activities have played a significant role in this improvement. In addition, since 2007, after the completion of treatment, the Vietnamese dental association invited the medical voluntary team for a special lecture contributing to the academic exchange. The Vietnamese prime minister invited the medical voluntary team for a meeting as an honored guest. (Figure 3)

The establishment of a foundation based

on the friendship and continued support will benefit the patients who suffer from various pathologies and facial deformities. If the medical voluntary activities effort expands to developing countries in the South-East Asia and many countries, our staff improve our medical technology via experiencing various types of diseases.

#### IV. REFERENCE

[www.kamprs.org](http://www.kamprs.org)

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#### 교신 저자

Young-Soo Jung

Department of Oral and Maxillofacial Surgery, College of Dentistry, Yonsei University, 134 Shinchon-Dong, Seodaemun-Gu, Seoul, Korea, 120-752

Tel : + 82-2-2228-3130 / Fax : + 82-2-2227-8022 / E-mail : [ysjoms@yuhs.ac](mailto:ysjoms@yuhs.ac)

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