



2010 Cleft Lip Charity Operation in Lao PDR

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ABSTRACT

2010년 라오스 구순구개열 자선수술에 관한 보고

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한국얼굴기형환자 후원회 의료봉사팀은 2010년 2월 6일에서 12일까지 라오스의 수도인 Vientiane을 방문하여 구순구개열 무료수술을 무사히 마쳤다. 의료봉사팀은 총 11명으로 구성되었다. 구강악안면외과의 6명과 간호사 2명, 학생 3명이었다. 수술은 라오스 비엔찬의 Mahosot 병원에서 수술장 한개에 수술 침대를 두개 놓고, 두팀을 구성하여 수술을 진행하였다. 당시 서울대학교 치과대학 예방치학교실 백대일 교수님께서 안식년을 맞아 라오스에서 라오스인 구강건강에 관한 national survey를 수행하고 계셨는데 수술팀에게 많은 도움을 주셨다. 2월 7일 토요일 예진 때는 한국국제협력단에서 파견한 국제협력의사 박병원 선생님(내과 전문의)께서 통역으로 도와 주셨다. 총 30명의 환자가(남:여 = 14:16) 수술을 받았으며, 환자들의 평균 나이는 9.7세였다. 수술 종류는 cheiloplasty, palatoplasty, rhinoplasty, scar revision, lip reconstruction로 구분 지을 수 있었으며, 모든 수술은 합병증 없이 마무리되었다. 이번 자선수술을 통해 30명의 환자를 수술하였고, 라오스 의사들에게 구순구개열 진료에 대한 기술을 교육할 수 있었다. 또 라오스 치과대학과 자매결연을 맺는 등 한국-라오스 우호증진에 많은 기여를 한바 이를 보고한다.

Key words: Cleft lip and palate, Charity operation, Lao PDR

I. INTRODUCTION

There is a high rate of disease, prevalence of cleft lip and palate, and a few qualified surgeons with lack of surgical equipments to provide adequate treatment and healthcare in developing countries, including Lao PDR. Treatment of cleft lip and palate is essential for restoration of esthetics and function, as well as minimization of any detrimental effect on dentomaxillofacial growth of young patients. Training the surgeons of the future is also recommended which is considered essential for improvement of oral health system such countries.

Cleft lip and palate charity operation supported by Korean Association of Research and Charity for Craniofacial Deformity has been performed for several years (Table 3). There are several aims of our activity including (1) treatment of cleft patients who have not had opportunities of surgery due to

their economic status, (2) support of surgical instruments and equipments as well as instructions regarding cleft surgery to surgeons residing in Laos, and (3) improvement of nongovernmental foreign relations through dental care and oral health education.

In this article we present our activities in Laos, which have been success both surgically and diplomatically.

II. COMPOSITION OF THE TEAM AND THE ACTIVITY

Our team consisted of eleven volunteers in total: six oral and maxillofacial surgeons, two nurses, and three students (Figure 1, Table 1). Mahosot Hospital, where all our activities have been carried out, is a hospital in Vientiane, Laos. It is one of the most important medical research and training centers in the country. Two beds were lo-

Table 1. Members of the cleft lip and palate charity operation team

| No. | Name | Affiliation | Position |
|-----|-------------------|--|------------------------------|
| 1 | CHOUNG, PILL-HOON | Seoul National Univ. Dental Hospital | Dean |
| 2 | LEE, WON | Uijeongbu St. Mary's Hospital | Professor |
| 3 | KIM, EUN-SUK | Chungnam National Univ. Hospital | Professor |
| 4 | LEE, UIL-YONG | Seoul National Univ. Dental Hospital | Fellow |
| 5 | PARK, JOO-YOUNG | Seoul National Univ. Dental Hospital | Joint Master's & Ph.D Course |
| 6 | PARK, SUNG-SOO | Seoul National Univ. Dental Hospital | Resident |
| 7 | PARK, EUN-HYUN | Seoul National Univ. School of Dentistry | Student |
| 8 | HONG, EUI-HYUN | Seoul National Univ. School of Dentistry | Student |
| 9 | PARK, HAE-JUNG | Seoul National Univ. Dental Hospital | Nurse |
| 10 | SEO, HO-SUNG | Seoul National Univ. Dental Hospital | Nurse |
| 11 | CHOUNG, HAN-SOL | | Student |



Figure 1. Members of the Charity Operation Team at Mahosot Hospital.

Table 2. Patient information, date of operation, and diagnosis

| No. | Name | Sex/Age | Diagnosis | Operation |
|-----|------|----------|---------------------------------------|--------------------------|
| 1 | G | M/23 | BCLP | cheiloplasty |
| 2 | H | M/5 | Lt. UCLP | cheiloplasty |
| 3 | K | M/3 | Lt. UCL | cheiloplasty |
| 4 | S | F/16 | Lt. UCL | cheiloplasty |
| 5 | X | M/5 | Rt. UCL, alvelous | cheiloplasty |
| 6 | Y | F/18 | BCLP | cheiloplasty |
| 7 | Y | F/3 | Lt. UCLP | cheiloplasty |
| 8 | M | M/45 | Scar d/t bomb | scar revision |
| 9 | D | F/37 | Rt. UCLP | cheiloplasty |
| 10 | S | M/6m | Lt. UCL | cheiloplasty |
| 11 | C | M/11m | BCL | cheiloplasty |
| 12 | P | F/22 | Rt. UCLP | palatoplasty |
| 13 | L | F/6m | Lt. UCLP | cheiloplasty |
| 14 | S | M/5m | Lt. UCLP | cheiloplasty |
| 15 | F | M/2 | Lt. UCLP | palatoplasty |
| 16 | C | M/4 | CP | palatoplasty |
| 17 | T | F/1y4m | BCLP | palatoplasty |
| 18 | T | F/15 | Lt. UCLP | rhinoplasty |
| 19 | M | F/2 | Lt. UCL | cheiloplasty |
| 20 | P | F/1 | Rt. UCL | cheiloplasty |
| 21 | Y | M/45 | lower lip defect | lower lip reconstruction |
| 22 | K | F/6m5d | incomplete Lt. UCLP | cheiloplasty |
| 23 | M | F/1y5m2d | Lt. UCL | cheiloplasty |
| 24 | Y | F/7 | Lt. UCL (incomplete) | cheiloplasty |
| 25 | S | M/5 | Lt. UCL | cheiloplasty |
| 26 | S | F/11 | Lt. UCL (incomplete) | cheiloplasty |
| 27 | S | F/2 | Lt. UCL (incomplete) | cheiloplasty |
| 28 | B | M/2 | CP | palatoplasty |
| 29 | B | M/8 | Rt. UCL | cheiloplasty |
| 30 | P | F/20 | submucosal cleft, whistle deformation | cheiloplasty |

cated in a single operation room for all the surgeries performed. Two surgeons, two anesthesiologists, one plastic surgeon from the local organization co-worked with us.

Our activities included oral health education to the patients, instructions regarding surgery to the local surgeons, and mainly, surgical treatment to the cleft lip and palate patients as well as other surgeries including scar revision and extraction of teeth.

III. PATIENTS

A total number of 30 patients visited Mahosot Hospital for operation of cleft lip and palate during our activity (Table 2). Among these patients, fourteen patients were males and sixteen were females. Seven patients have had experienced surgical treatment previously. Diagnosis of the patients varied from simple to complicated ones. The types of operations performed were as follows: cheiloplasty, palatoplasty, lip reconstruction, scar revisoin, and rhinoplasty.

The surgeries have been carried out for 4 days from February 9th to February 12th, 2010. No complications were found during and right after surgeries. The patients were satisfied with the treatment results.

IV. CASE PRESENTATION

1. Case 1: UCL

5-year old male patient presented with unilateral cleft lip. Past medical history revealed no surgical experience. The operation had been postponed due to economic status of the parents. After surgical preparation, the lip was repaired by Choung's flag method (Figure 2. A, B).

2. Case 2: UCLP

12-months old female patient presented with her parents. Clinical examination revealed unilateral cleft lip and palate. Protrusion of

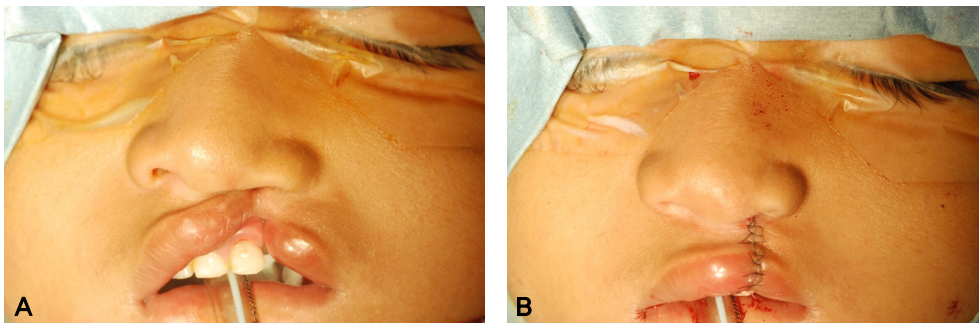


Figure 2. UCL. (A) Pre-operation, (B) Post-Operation.

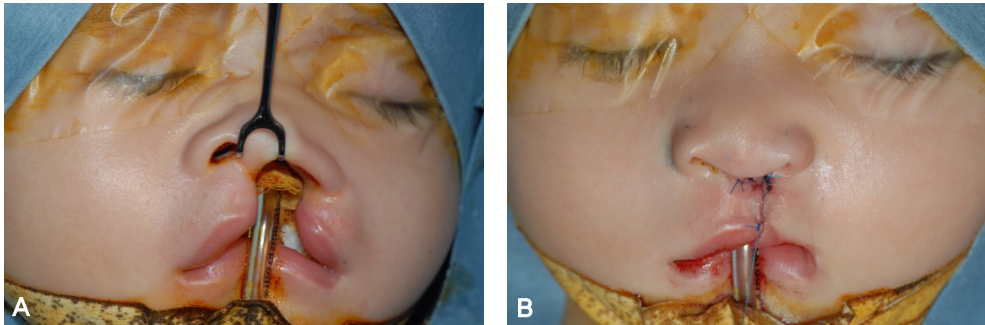


Figure 3. UCLP. (A) Pre-operation, (B) Post-operation.

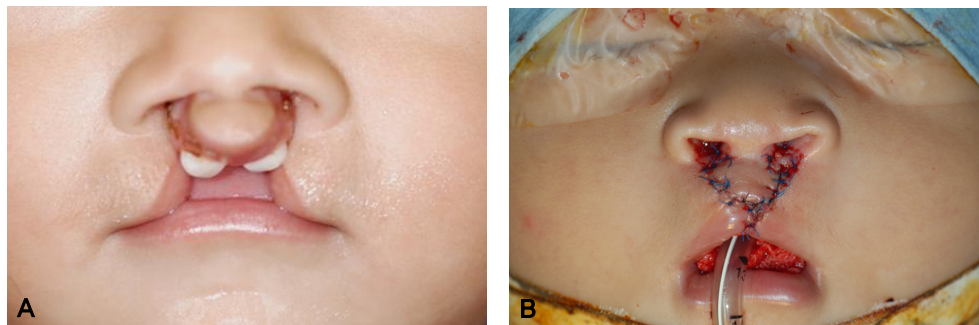


Figure 4. BCL. (A) Pre-operation, (B) Post-operation.

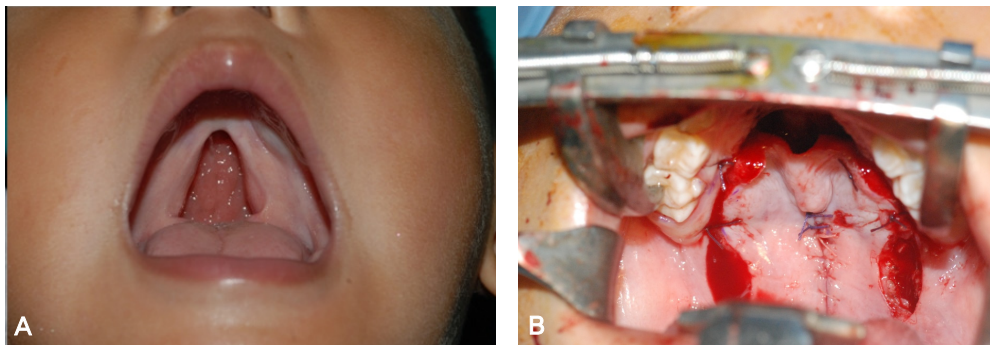


Figure 5. CP. (A) Pre-operation, (B) Post-operation.

prolabium was moderate, but defect of the lip was wide. Choung's flag method was used for the reconstruction of collumella and successive lip repair (Figure 3. A, B).

3. Case 3: BCL

11-months old male patient showed complete bilateral cleft lip. The surgical treatment was performed with Choung's modified flag flap method (Figure 4. A, B).

4. Case 4: CP

4-year old male patient who did not have the opportunity of surgery due to economic problems revealed wide cleft palate. Wardill V-Y pushback method was used for the repair of palate (Figure 5. A, B).

treated congenital disabilities, tumors, burns, and traumas¹⁻³⁾. Through the cleft lip charity operations that took place in Laos from February of 2010, 26 patients with untreated congenital disabilities, traumas, and other forms of facial defects were able to receive surgical treatment. The esthetics and function that are essential in everyday life were recovered. The patients were satisfied with the results, and they were able to return to their normal social life.

V. DISCUSSION

Recently, many humanitarian organizations have sent plastic surgery teams to developing countries to treat patients with un-

One of other important activities included instruction and training to the local surgeons. The system of health care is very

Table 3. Cleft lip charity operation activities by KARC

| No. | Place | Date | No. of patients |
|-----|------------|--------------------|-----------------|
| 1 | Pakistan | 2002.06.07 ~ 06.15 | 30 |
| 2 | Egypt | 2002.09.20 ~ 09.29 | 32 |
| 3 | Pakistan | 2003.02.15 ~ 02.23 | 34 |
| 4 | China | 2003.07.27 ~ 08.03 | 10 |
| 5 | Egypt | 2003.09.05 ~ 09.14 | 38 |
| 6 | Cambodia | 2004.03.14 ~ 03.16 | |
| 7 | Vietnam | 2004.03.16 ~ 03.19 | |
| 8 | Jordan | 2004.05.25 ~ 05.29 | |
| 9 | China | 2004.07.25 ~ 07.29 | 15 |
| 10 | Kenya | 2004.09.23 ~ 10.05 | 31 |
| 11 | China | 2005.07.17 ~ 07.22 | 16 |
| 12 | Kenya | 2005.12.02 ~ 12.11 | 45 |
| 13 | India | 2006.07.08 ~ 07.16 | 32 |
| 14 | India | 2007.07.12 ~ 07.22 | 52 |
| 15 | Vietnam | 2007.09.22 ~ 09.30 | 49 |
| 16 | Ehiopia | 2008.07.24 ~ 08.03 | 107 |
| 17 | Kyrgyzstan | 2008.12.15 ~ 12.22 | 22 |
| 18 | Kyrgyzstan | 2009.07.24 ~ 08.01 | 28 |
| 19 | Laos | 2010.02.05 ~ 02.13 | 30 |

poorly developed in Laos, with only one doctor per 4200 persons available nationwide. The hospitals were poorly equipped which made it hard for most of the people residing in Laos to receive necessary treatments, other than simple emergency treatments, lab tests, and X-ray images. Many cleft lip and palate patients living in rural areas were not even aware of the surgical treatments. So, it was important to provide opportunities of surgery to people suffering from facial deformities. This was accomplished by direct operation to the patients, as well as instruction to future surgeons.

VI. CONCLUSION

The Cleft Lip Charity Operation Team of the Korean Association of Research and Charity for Craniofacial Deformity (KARC) sponsored by POSCO, Community Chest of Korea, and Seoul National University visited Laos from February 6th to February 12th,

2010, for the operation of 26 patients with dentofacial deformity. All the operations were successful. This type of volunteered activity is thought to be required to continue in the future for treatment of patients without opportunities of surgery in many developing countries, and it is considered important for the improvement of non-governmental foreign relations.

VII. REFERENCES

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