A Case of Reconstruction of Saddle Nose Deformity in Leprosy

Yutaka Ishida(1)(2), Lorella Pecorini(1) and Elena Guglielmelli(1)

1) PIME Sisters Khulna Leprosy Program, Dass Para Road, Boro Boyra, Khulna, 9,000, Bangladesh
2) Dep. of Orthopedic Surgery, Okayama Hakuaikai Hospital, Okayama-city, Japan

[Received: 28 June 1999/ Accepted: 1 September 1999]

Key words: Leprosy, Saddle nose deformity, Reconstructive surgery

A case of reconstructive surgery for saddle nose deformity is presented in this paper. A 22 year-old Bengali female who had completed WHO/MB regimen for 27 months underwent reconstructive surgery for saddle nose deformity. Since a saddle nose is one of the symbols of leprosy, it often causes serious psychological and social troubles to patients. This happens more often when the patient is a young unmarried woman. In this case the saddle nose seemed to be very serious. After being discharged from hospital she got married and had a baby. This operation gave the patient great relief to live in the community, because she no longer had serious visible evidence of leprosy on the body. Though the correction of the deformity without any dysfunction does not always have priority over other surgeries at a busy leprosy control project in Bangladesh, it has merit both in patients themselves and in the society around them because it leads to the elimination of the stigma of leprosy.

A saddle nose has been referred to as one of the typical deformities of leprosy. It is still one of the most dreadful deformities which affect patients' social life. In untreated lepromatous leprosy, nasal mucosa tends to be infected early in its course. The chronic ulceration of nasal mucosa makes underlying components of nasal structures exposed to non-specific infections, which leads to the depression of a nose. The incidence rate of a saddle nose has been reducing dramatically because of an early detection of new cases followed by the treatment of WHO/MDT. Unfortunately there still remain some hidden or neglected cases of this deformity. Since the deformity of a nose is conspicuous, patients usually have some social difficulties as well as physical and mental problems. This happens more often when the patient is a young unmarried woman. The correction of this deformity has merit both in patients themselves and in the society around them because it leads to the elimination of the stigma of leprosy.

CASE

Name: N.M., Sex: Female, Age: 22 years old, Year of birth: 1974, Race: Bengali, Birth place: Barishal dist, southern of Bangladesh
Type of leprosy: Lepromatous leprosy
Bacterial Index(average of 4 sites)(M.I.): 5.33+(20%)

Treatment of leprosy:
1. Modified MB short regimen from 9/July/1992 (BI=5.33, MI=20%) to 5/Aug./1992: Rifampicin 450 mg/day + Ofloxacin 300 mg/day for 28 days
2. WHO MB regimen was followed from 11/Aug/1992 (BI=5+, MI=3%) to 19/Aug./1994 (BI=3+, MI=0%)

History of present illness:
The disease started with some hypo-pigmented patches on the face when she was 11 years old. And they were followed by infiltrated skin on the face, madarosis, nodules of ear lobes and a saddle nose.
She was first taken to a leprosy clinic in Khulna, in
the south west of Bangladesh at the age of 18 years and took anti-leprosy drugs for 2 years. During the chemotherapy she was admitted to a referral hospital four times for the treatment of Erythema Nodosum Leprosum (ENL) reaction. She was released from treatment (RFT) after completing WHO/MB regimen on the 19th of August 1994. She was admitted again for reconstructive surgery of a saddle nose on the 9th of November, 1996 and the operation was performed on the 13th November, 1996.

THE PROCEDURE OF A BONE-GRAFTED NOSE 3)

Under spinal anesthesia a grafted bone was taken from the inner table of the left-iliac crest and trimmed.

![Photo 2. Post operative plaster splint](image)
![Photo 3. Post-operation](image)
After enough infiltration of local anesthesia around nose, the nasal and frontal bone, a small skin incision was made sagittally on the tip of the nose. With scissors' dissection a tunnel was made in order to remove fibrous adhesion and then to make a grafted space and bed on the nasal and frontal bone. A notch was made in the frontal bone with a small chisel. Homeostasis was done by a gauze with epinephrine packed for a while in the tunnel. The grafted bone was inserted into the tunnel while the tip was impacted into the globular notch. Plaster splint was applied to cover the nose for 3 weeks after the operation.

DISCUSSION

The plastic surgery for saddle nose deformity due to leprosy without any dysfunction has been the last option to do at a busy leprosy control project in Bangladesh. Among deformities of the face the surgical correction of lagophthalmos is usually considered to be important from the point of view of the prevention of exposure to keratitis and its consequences. Since a saddle nose is one of the symbols of leprosy, it often causes serious psychological and social troubles to patients. In this case the saddle nose seemed to be very serious. After being discharged from hospital she got married and had a baby. This operation gave the patient great relief to live in the community, because she no longer had visible evidence of leprosy on the body. This procedure does not require material such as acrylic prosthesis, which is hardly available in the rural areas of Bangladesh, and so it is easy to follow. The correction of deformities due to leprosy is sometimes as important for patients as the treatment of leprosy. It helps to demonstrate that even visible deformities can be corrected and that leprosy can be curable without leaving any visible deformity and encourages local people to join leprosy eliminating campaigns (LEC) as volunteers.

REFERENCES

6) Tovey FH, Reconstruction of the nose in leprosy patients, Lepr Rev. 36: 215-239 (1965).
8) 大谷藤郎：ハンセン病医学, 東海大学出版会, 東京, p238 (1997).
ハンセン病による鞍鼻の再建手術の一例

石田 裕1)2)*, Lorella Pecorini3) and Elena Guglielmelli1)
1) PIME Sisters Khulna Leprosy Program, Dass Para Road, Boro Boyra, Khulna, 9,000, Bangladesh
2) 岡山博愛会病院整形外科、岡山市

[受付：1999年6月28日、受理：1999年9月1日]

キーワード：ハンセン病、鞍鼻、再建手術

22才、ベンガル人女性、L型ハンセン病の治療後の鞍鼻変形に対し、腸骨よりの骨移植による再建手術を行なったのを機会に、ハンセン病コントロール活動の中での、この変形の矯正の意味について若干の考察を加え報告した。

鞍鼻は、未治療のまま長期間放置されたL型ハンセン病の患者に見受けられる。バングラデシュでは、早期発見キャンペーンとWHOの多剤併用療法の普及の結果、新規登録者における鞍鼻の頻度は激減した。しかし、後遺症として鞍鼻を持っている元患者は散見することができる。ハンセン病の後遺症の内、鞍鼻は、患者自身の身体的障害や精神的負担ばかりではなく、通常の社会生活を送る際にも大きな影響を及ぼすと考えられる。鞍鼻は、機能障害の少ない場合が多く、ハンセン病の後遺症の中でその重要性は低く見られやすい。また、他の手足や目等の障害の予防の観点からも、この変形に対する対策は後回しにされやすい。しかし、鞍鼻は目につきやすい変形であるの故、本症の矯正は本人にとってはハンセン病の治療と同じ程度重要である。本患者は、術後、結婚出産し、現在正常な社会生活を営んでいる。ハンセン病の後遺症は矯正出来、ハンセン病は目に見える後遺症を残さず治ることが出来ることを地域住民に示し、ハンセン病に対する関心の高い先人観を払拭することにより、新患発見等の地域での活動により熱心な協力を得ることが可能となる。今回の経験から、鞍鼻に対し適切な矯正術を行なうことは、患者自身はもとよりハンセン病コントロールにとっても重要であると考えられた。

*Corresponding author:
〒240-0023 横浜市保土ヶ谷区岩井町350-4
Tel/Fax:045-721-2734