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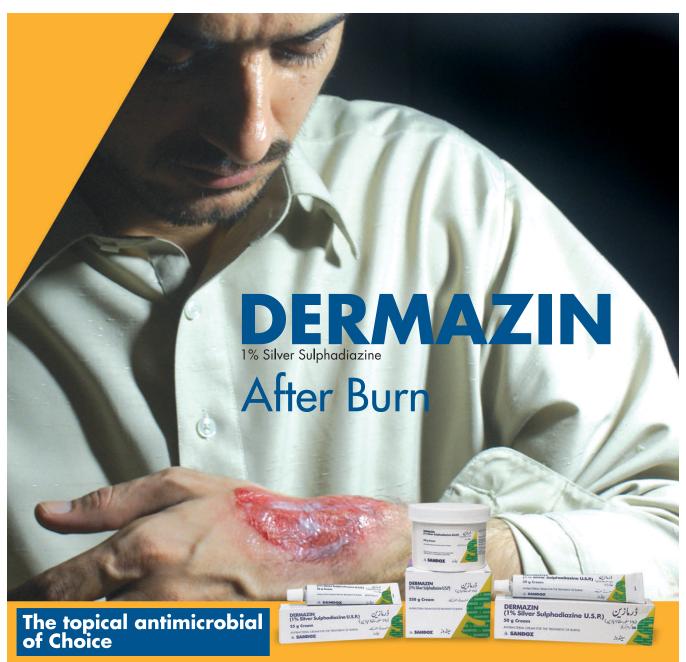
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ORIGINAL ARTICLE

Gynaecomastia correction: A review of our experience

Mohan A, Khan A, Srinivasan K, Roberts J

Introduction:

Gynaecomastia is a common problem in the male population, particularly in young adults, with a reported prevalence of up to 36%¹. The term refers to a benign female-like enlargement of the male breast resulting from an increase in ductal tissue, stroma, and/or fat.

Enlarged breasts can cause anxiety, self-consciousness and embarrassment, functional problems and psychosocial discomfort and fear of malignancy. It is not surprising therefore, that gynaecomastia is the most common cause for seeking medical advice for a breast condition in men. Surgical options for gynaecomastia include liposuction, open resection, and resection with skin reduction. Outcome studies of surgical correction have generally shown high levels of satisfaction^{2,3}. However, Ridha et al demonstrated only a 62.5% of patients within a cohort of 74 patients were 'satisfied' or 'very satisfied' with their surgery⁴. Surgery is, therefore, not a decision to be taken without careful patient assessment. Various techniques have been described over the years but no technique has yet gained universal acceptance.

We aimed to review all gynaecomastia patients operated on under the care of one consultant in a regional unit over a 7-year period to assess the morbidity and complication rates associated with the procedure and to determine whether certain surgical techniques produced improved outcomes.

Key Words: Gynaecomastia, Liposuction, Open Resection.

Gynaecomastia is a common problem in the male population with a reported prevalence of up to 36%. Various treatment techniques have been described but none have gained universal acceptance. We reviewed all gynaecomastia patients operated on under the care of one consultant over a 7-year period to

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assess the morbidity and complication rates associated with the procedure.

Clinical notes and outpatient records of all patients who underwent gynaecomastia correction at University Hospital North Staffordshire between 01/10/2001 to 01/10/2009 were retrospectively reviewed. A modified version of the Breast Evaluation Questionnaire was used to assess patients satisfaction with the procedure.

Twenty-nine patients and a total of 53 breasts were operated on during the study period. Patients underwent either liposuction alone (6 breasts – 11.3%), excision alone (37 breasts – 69.8%) or both excision and liposuction (10 breasts – 18.9%). Twelve operated breasts (22.6%) experienced some form of complication. Minor complications included seroma (2 patients), superficial wound dehiscence (2 patients) and minor bleeding not requiring theatre (3 patients). Two patients developed haematomas requiring evacuation in theatre. No cases of wound

infection, major wound dehiscence or revision surgery were encountered. Twenty-six patients (89.7%) returned the patient satisfaction questionnaire. Patients scored an average 4.12 with regards comfort of their chest in different settings, 3.98 with regards chest appearance in different settings, and 4.22 with regards satisfaction levels for themselves and their partner/family.

Overall complication rate was 22.6%. Grade III patients experienced the highest complication rate (35.7%), followed by grade II (22.7%) and grade I (17.6%). Overall complication rates among the excision only group was the highest (29.8%) followed by the liposuction only group (16.7%) and the liposuction and excision group (10.0%). There were high satisfaction rates amongst both patients and surgeon. Eleven patients (37.9%) had their outcome classified as 'excellent' by the operating surgeon, 16 patients (55.2%) as 'good', 1 (3.4%) as 'satisfactory' and 1(3.4%) as 'poor'.

Gynaecomastia is a complex condition which poses a significant challenge to the plastic surgeon. Despite the possible complications our case series demonstrates that outcomes of operative correction can be favourable and yield high levels of satisfaction from both patient and surgeon.

Methods

Operating procedure notes, clinical notes and outpatient records of all patients who underwent gynaecomastia correction at University Hospital North Staffordshire during the the period 01/10/2001 to 01/10/2009 were retrospectively reviewed. For the purpose of this study, we considered each operated breast as an individual case.

The grade of gynaecomastia, the presence of skin excess, causative factors, duration of symptoms and surgical procedure were recorded. Short and long term minor and major complications, poor results and revision rates were recorded and analysed.

No validated outcome assessment questionnaire exists specifically for gynaecomastia correction. We therefore created a three item questionnaire which was sent to all patients who underwent surgery to ascertain their satisfaction with the procedure. This was based on the more comprehensive 55 item Breast Evaluation Questionnaire which is a validated assessment questionnaire designed to assess patient satisfaction with breast and qualityof-life outcomes following a variety of breast surgery procedures. A similar proforma was used by Ridha et al⁴. The proforma asked patients to rank their satisfaction levels with their surgery in relation to three factors. The first question related to patients' comfort with their breast/chest in different settings (intimate, social and professional). The second question related to the degree of comfort with their breast/chest appearance. The third question asked patients to rank the satisfaction level for themselves and their partner/family. Patients were asked to respond on a 5-point Likert scale (1=very dissatisfied; 2=dissatisfied; 3=neither; 4=satisfied; 5=very satisfied).

Patients were classified as having either mild, moderate, or gross gynaecomastia as per Simon's classification⁶ and the presence of skin excess was noted. Twenty-six patients returned the questionnaire (89.6%).

Results

Twenty-nine patients and a total of 53 breasts were operated on during the study period. Patients were referred from a variety of sources. General practitioners referred 24(82.8%) patients, 4(13.8%) were referred by the general surgical team and 1(3.4%) from the paediatric team. Twenty-eight patients cited emotional problems as the reason for them seeking help whereas one complained of pain and discomfort. The cohort characteristics, outcomes and morbidity are illustrated in Table 1.

The average time from the first outpatient clinic appointment to surgery was 25.3 weeks (range 5-156). Conservative management was attempted in 7 (24.1%) patients before they were listed for surgery. Patients underwent either liposuction alone (6 breasts – 11.3%), excision alone (37 breasts – 69.8%) or both excision and liposuction (10 breasts – 18.9%). All but 5(17.2%) patients had drains inserted which were removed 1-3 days postoperatively.

Twenty-six patients (89.7%) wore some form of support garment post-operatively, with 18(62.1%) wearing an abdominal binder. Support garments were worn for an average of 4.6 weeks (range 3-6) following surgery. Twelve operated breasts (22.6%) experienced some form of complication. Minor complications included seroma (2 patients), superficial wound dehiscence treated conservatively (2 patients) and minor bleeding not requiring theatre (3 patients).

The only acute major complication encountered were haematomas requiring evacuation in theatre (2 patients). There were no cases of wound infection or major wound dehiscence documented within our patient group. Although one patient was noted to have skin excess post-operatively that may have benefited from revision surgery, this was not possible due to hypertrophic scarring. Patients were followed up for an average of 6.0 months (range 1-11). One patient did not attend again after their first post-operative appointment.

Twenty-six patients (89.7%) returned the patient satisfaction questionnaire. Patients scored an average 4.12 with regards comfort of their chest in different settings, 3.98 with regards chest appearance in different settings, and 4.22 with regards satisfaction levels for themselves and their partner/family.

Table 1: Patient cohort characteristics, outcomes and morbidity

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Age at surgery; mean (range)	24.5 years (13-39)
Patient weight; mean (range)	82.7 kg (60-104)
Patient BMI; mean (range)	27.1 (20-35.1)
Duration of symptoms; mean (range)	5.3 years (1-20)

Grade of gynaecomastia	Operated breasts
I	17
II	22
III	14

Side involved	No. of patients
Left	5
Right	0
Bilateral	24

Operative time; mean (range)	76 minutes (30-180)
Operative technique	Operated breasts
Liposuction only	6
Excision only	37
Liposuction & excision	10
Weight of tissue removed; mean (range)	155 grams (10-346)
Hospital stay; mean (range)	1.6 days (1-4)
Binder use	18 patients
Morbidity	
Minor complications	7/53 ^a
Acute major complications	4/53 ^b
Unsatisfactory result	1/53 ^c

^a (Seromas, bleeding not requiring theatre, superficial wound dehiscence)

Discussion

As discussed earlier, gynaecomastia has peaks in incidence within three age groups. Although the highest prevalence is among middle aged and older men (50-80 years old), the oldest patient in our cohort was 39 years old. This may relate to the fact that the most common trigger for surgery was emotional distress and middle aged/older men may be less affected by this stimulus compared to the younger age group.

Overall complication rates for gynaecomastia surgery have been reported to be 15.5%, with the highest rate in grade I patients $(21.6\%)^7$. Our overall complication rate was slightly

higher than this (22.6%). However, these were mainly minor acute complications that did not significantly affect the final result. There were no cases of nipple-areola complex necrosis or areolar tethering.

Only two patients returned to theatre for evacuation of a haematoma. In our series, grade III patients experienced the highest complication rate (35.7%), followed by grade II (22.7%) and grade I (17.6%). Previous studies have quoted overall revision surgery rates as 17.4%, with the highest rate in grade II patients (34.8%)⁷. None of the patients in our series underwent revision surgery although one may have benefitted from this but could undergo surgery due to hypertrophic scarring.

Complication rates between different surgical techniques also varied significantly. Overall complication rates among the excision only group was the highest (29.8%) followed by the liposuction only group (16.7%) and the liposuction and excision group (10.0%).

b (Haematomas, wound dehiscence requiring theatre, wound infection). All of these cases were taken back to theatre on the same admission

^c Revision surgery not possible due to hypertrophic scarring

Sophocles et al⁸ found that the weight of the specimen excised was not a significant predictor of minor or acute major complications. This is also confirmed by our series of patients. It is not possible to examine whether any factors contribute to a poor cosmetic result within our series as only one patient had an unsatisfactory result.

Outcome studies of gynaecomastia correction have shown varying levels of satisfaction with the results of surgery with Fruhstorfer et al² showing high levels of satisfaction while Ridha et al⁴ showed much lower levels. Our series demonstrated generally high satisfaction rates amongst both patients and surgeon. Eleven patients (37.9%) had their outcome classified as 'excellent' at their second follow up appointment by the operating surgeon, 16 patients (55.2%) as 'good', 1 (3.4%) as 'satisfactory' and 1 (3.4%) as 'poor'. Patients too were generally 'satisfied' with their outcome with regards comfort and appearance.

Conclusion

Gynaecomastia is a complex condition which poses a significant challenge to the plastic surgeon. The initial treatment should aim to correct any underlying abnormality or discontinuing any medications that may be contributing to the condition. Although the efficacy of medical treatment has not yet been well established, conservative measures should be considered prior to surgery.

Gynaecomastia present for more than 2 years is unlikely to regress spontaneously or with medical treatment due to the tissue becoming irreversibly fibrotic³. In these cases surgery remains the mainstay of treatment. Despite many operative techniques being described, the principal aims of surgery remain to correct the deformity, restore normal body contour and image, maintain the viability of the nipple-areola complex and avoid excessive scarring⁸.

Although there are significant possible complications associated with surgery, our case series demonstrates that with careful planning and shrewd patient selection, outcomes of operative correction can be favourable and yield high levels of satisfaction from both patient and surgeon.

Conflict of interest statement

We declare there is no financial or personal relationship with other people or organisations that could inappropriately influence this work.

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ORIGINAL ARTICLE

Coverage of open Tibial Fractures: what to Do?

Prof. Moazzam Nazeer Tarar, Dr. Ata Ul Haq

Introduction:

Standards for management of open tibial fractures have been set and practiced around the globe1. Our trauma burden is one of the highest in the world. According to W.H.O report on road safety published in 2013 there are 30,131 deaths per year due to RTA in Pakistan2 and for every death there are 20 people injured. It means approximately 602,640 injuries per year due to road traffic accidents only. We have an array of other accidents like collapsed buildings, electrocution, machine injuries, agricultural injuries and last but not the least blasts due to the wave of terrorism in addition to RTA, that makes the number more formidable. Although no reliable national figures are available but we can get some estimate from Rescue 1122(rescue service of Punjab) data3. They transferred 75,265 injured persons per year to different hospitals.

Key Words: Tibial Fractures, Fasciocutaneous, Sural art hap.

Being a plastic surgeon of a society with massive trauma burden, every one of us is faced with patients requiring soft tissue coverage of open tibial fracture. Despite being such a common problem, still there is no consensus regarding treatment options.

There are certain management issues that are settled i.e. timing of surgery but there are two major queries regarding flap selection for tibial coverage.

- 1. Whether to use a local or free flap?
- 2. Which one is more suitable, fasciocutaneous or muscle flap?

We have tried to find answers for these questions keeping in mind our circumstances. In literature both local and free flaps have their advocates. Arguments in favor of local flaps include: shorter operating time, technical ease and usually replacement of like with like. The arguments against the use of local flaps include: zone of trauma extending into the tissue to be used, hence not very reliable, usually compromise the secondary

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surgery needed for bony problems. Also donor site is usually cosmetically unsightly. Distal necrosis rate is approximately 15-20% in local flaps 4,5,6 that is unacceptably high compared to the free flap surgery. These figures reflect that flap is compromised at the end where it is most needed hence should equate the total flap failure.

Another argument against the local flaps is that if patient ends up with below knee amputation due to any reason then stump formation will be compromised. This is particularly true in case of distal 3rd fractures. Local Fasciocutaneous flaps used to cover distal 3rd of tibia borrow the skin which is normally used for stump closure in case of Below Knee Amputation BKA. This means using skin graft or another flap (usually free flap) for stump coverage Free flaps proponents claim free flap success rate of more than 95%7,8, a clear winner over local flaps. It imports tissue to the injured leg thus not compromising already injured leg. Donor site is usually distant and hidden so cosmetic result is usually acceptable.

In our special circumstances of massive work load versus minimum manpower and resources, we should keep our options open. Local flaps should be used for coverage of small wounds and that too of low energy type. For large and high energy trauma we should go for free flaps because local tissue is usually injured and not suitable for fracture coverage. Our dictum is when in doubt go for free flap. For difficult defects, free flap can be an easy option.

Now we come to the second question of muscle vs. fasciocutaneous flaps. Generally it was agreed that muscle flaps contribute greater vascularity than fasciocutaneous counterparts9-13. Based on this fact muscle flaps were considered a better option for wound healing (bone union) and control of infection14. This concept has been challenged in recent years. 15 A recent study by James K.-K. Chan, Jagdeep Nanchahal and Lorraine Harry stats that fasciocutaneous flaps have even better blood supply per unit area than muscle flaps once transferred. But Muscle provides a bone anabolic environment through the expression of members of the transforming growth factor -β super family of growth and differentiation factors, including the bone morphogenetic proteins. This results in better bone healing 16.

Another factor to be kept in mind while deciding the flap for tibial coverage is the dead space. We feel that if there is dead space it should be obliterated and muscle flap is the better choice in this situation. Fasciocutaneous flap is usually tented over the dead space not obliterating it. This leads to the accumulation of exudate under the flap which ends up in infection in most of the cases.

As we have already mentioned that revisional surgery is relatively easier in case of fasciocutaneous flap than the muscle flaps. Also muscle flaps have high metabolic rate than fasciocutaneous ones and thus need more blood supply for survival than their counterparts. It means that fasciocutaneous flaps tolerate ischemia better than muscle flaps resulting in higher survival rate of fasciocutaneous flaps than muscle flaps. So fasciocutaneous flap is preferred choice if it

can serve the purpose.

We tend to ignore cosmesis and take it as non issue in lower limb but this is an issue and once healing is achieved, patients do complain about appearance of the limb. There is consensus that fasciocutaneous flaps have better cosmetic outcome compared to muscle flaps. However local fasciocutaneous flaps do create unsightly donor sites. Usually there are dog ears and persistent edema resulting in poor cosmesis.

When we consider our circumstances following are the facts.

Most of the plastic surgery units in the country have skills to perform microsurgical procedures so facilities are not an excuse any more. We believe in this time and age every trained plastic surgeon should be capable of microsurgery.

Workload is main problem in our set up. It's not always possible to do free flaps for every case. Sometimes despite all your intentions you find it hard to perform microsurgery because of heavy workload and you go for alternative options. This should be decided on merit because a failed local flap done inappropriately will land the patient in more trouble. However Local flaps cannot be condemned. They have their place and require more technical skill and knowledge to achieve good results. Also Adhoc perforator flaps are coming forward and sometimes a local perforator flap gives as good reconstruction as free flap.

Most of the patients present late with infection already there so eradication of infection is almost always an issue in our set up.

Our recommendations are

- In case of small defects due to low energy trauma, local flaps are the preferred choice.
- Large defects and high energy trauma wounds usually need free tissue transfer.
- If there is no dead space and fracture has no adverse features then fasciocutaneous flaps are the preferred choice.

In case of dead space or the fracture itself has difficult configuration, muscle flaps should be considered as the first choice.

Here are few representative cases:

FIG. 1 (A through C) Coverage of exposed ankle joint with Pedicled fasciocutaneous flap (reverse flow sural artery flap).



FIG. 1(A)



FIG. 1(B)



FIG. 1(C)

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FIGURE 2 (AThrough C):

Coverage of open tibial fracture with free Anterolateral Thigh Flap.



FIG. 2 (A)



FIG. 2 (B)



FIG. 2 (C)

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FIG. 3 (Athrough C):

Coverage of open tibial fracture of lower 1/3rd with distally based hemisoleus muscle flap.



FIG. 3(A)



FIG. 3(B)

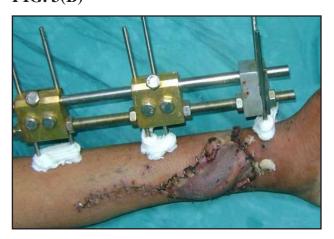


FIG. 3(C)

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ORIGINAL ARTICLE

Head and Neck Squamous Cell Carcinoma a5-year Experience at a Tertiary Care Hospital in Bahawalpur

M. Hamid Chaudhary, Samina Shabbir, M Shams ul Alam, Ehsan Ullah, Khalid Usman

Background: Squamous cell carcinoma is the commonest head and neck malignancy which accounts for approximately 20% of the cancer burden in Asian countries. Major risk factors include tobacco smoking thus a rendering it a preventable disease. Frequencies and incidence rates of site-specific head and neck squmaous cell carcinoma have been reported regularly in different studies from various parts of the country. Current study aims at contributing the similar data from Bahawalpur region.

Methods: It was a descriptive study including 184 biopsy proven cases of squamous cell carcinoma from head and neck region reported by Department of Pathology, Quaid-e-Azam Medical College Bahawalpur during January 2008 and December 2012. Data was acquired from hospital and lab records and analysed using SPSS version 18.

Results: Mean age of the patients was 55.76 ± 7.21 (median: 50) years. Male to female ratio was almost 2:1. History of smoking was positive in 72.28% of patients. The most common affected sites in order of frequency were larynx (n=79, 42.93%), hypopharnx (n=36, 19.56%), oral cavity (n=29, 15.76%), face/skin (n=24, 13.04%), lips (n=10, 5.43%) and tongue (n=6, 3.26%). More than a half of the tumours were histologically classified as well-differentiated squamous cell carcinomas (n=94, 51.09%).

Conclusions: Head and neck squamous cell carcinoma has a peak age in 6th decade of life and twice common in men as compared to women. Most frequent site of HNSCC in Bahawalpur region is larynx.

Key Words: Head and neck, cancer, squamous cell carcinoma, larynx, pharynx, oral cavity, Bahawalpur

Introduction:

Head and neck cancer is a major health problem worldwide. It is a major global health issue, with about half a million new cases diagnosed per year, and their incidence appears to be increasing in developing countries.,2 Squamous cell carcinoma is the commonest head and neck malignancy which accounts for approximately 20% of the cancer

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burden in Asian countries. Major risk factors include tobacco smoking thus a rendering it a preventable disease. Head and neck cancers, ICD-10 (International Classification of Diseases 10th Revision) categories C00-C14 (cancer of the lip, oral cavity and pharynx) and C32 (larynx) are categorized amongst the top ten malignancies globally. Head and neck cancers are grouped together with the justification of similar natural history, epidemiology, risk factors, morphology, and control measures. 3 HNC comprise of soft tissue neoplasms of oral cavity including lips, nasal cavity and paranasal sinuses (PNS), pharynx, larynx and salivary glands. 4 More than 5% of all malignant tumors worldwide are head and neck cancer, with more than 100,000 cases diagnosed in Europe each year.5

The risk increases in proportion to the intensity and duration of the exposure to each carcinogen. Yet, individual susceptibilities to these risk factors vary within the general population. The basis for this susceptibility may be inborn or acquired, which is still under investigation. Head and neck cancers are mainly seen in the low socioeconomic strata.()

Many factors that are implicated for its causation are consumption of tobacco in its various forms, alcohol, smoking habits, lack of awareness, and lack of proper nutrition. The etiology of head and neck squamous cell cancer is multifactorial with alcohol and tobacco consumption considered to be the main risk factor. Other factors include irradiation, oncogenic virus infections like Epstein Barr virus (EBV) and Human Papilloma Virus (HPV). EBV is commonly associated with nasopharyngeal carcinoma and HPV has been associated with laryngeal carcinoma.^{3,7}

The incidence of head and neck cancer increases with age, especially after 50 years of age. Although most patients are between 50 and 70 years old, head and neck cancer does occur in younger patients. There are more women and fewer smokers in the younger patient group. Mean age of presentation lies in the 5th-6th decade for the Asian population as compared to 7th-8th decade among the North American population. Incidence of oral cancer in South-East Asia and of oral cavity plus nasopharyngeal cancer in East Asia follows the global HNC pattern.

In the Western world, squamous cell carcinoma of the head and neck (HNSCC) accounts for more than 90% of all head and neck cancers. The 5-y survival rate of less than 30% is due to a high lymphogenic metastatic tendency, a high recurrence rate, and an increased occurrence of secondary tumors.⁵

The commonest epithelium covering the head

and neck mucosal surfaces is squamous epithelium and this may explains the domination of squamous cell carcinomas.⁹

SCC has a focal invasion and its behavior depends on the region that it originates. Each anatomic area has its own growth patterns and prognosis .Head and neck squamous cell carcinoma (HNSCC) has been had a challenging treatment for a long time because of the high rates of recurrence and its advanced disease at the time of diagnosis. Frequencies and incidence rates of site-specific head and neck squmaous cell carcinoma have been reported regularly in different studies from various parts of the country. Current study aims at contributing the similar data from Bahawalpur region.

Methods:

It was a retrospective cross sectional descriptive study. All 184 biopsy proven cases of squamous cell carcinoma from head and neck region reported by Histopathology Section of Department of Pathology, Quaide-Azam Medical College Bahawalpur in a period of 5-years i.e. from January 2008 to December 2012 were included in the study. Data about age, gender, exact site of tumour, history of tobacco smoking, histological diagnosis and tumour grade was acquired from hospital and lab records. Data was entered and analysed using SPSS version 18. Means were calculated for quantitative and percentages were drawn for qualitative variables.

Results:

A total of 184 biopsy proven cases of head and neck squamous cell carcinoma were reported at Department of Pathology, Quaid-e-Azam Medical College from January 2008 to December 2012. Mean age of the patients was 55.76±7.21 years ranging from 23 to 85 years. Median age was 50 years. Male to female ratio was almost 2: 1 (126 males: 58 females). Females were affected at little younger age

53.15±6.90 years as compared to their male counterparts (58.33±7.85 years).

Majority of patients were village dwellers (n=141, 76.63%) as shown in Figure 1. History of current active tobacco smoking was positive in a large proportion (n=133, 72.28%) of patients as shown in Figure 2.

The most common affected sites in order of frequency were larynx (n=79, 42.93%), hypopharnx (n=36, 19.56%), oral cavity (n=29, 15.76%), face/skin (n=24, 13.04%), lips (n=10, 5.43%) and tongue (n=6, 3.26%). Just more than a half of the tumours were histologically classified as well-differentiated squamous cell carcinomas (n=94, 51.09%) on the basis of presence of keratin, intercellular bridges and low mitotic activity while other tumours were graded as moderately and poorly differentiated as shown in Table 1.

Head and neck malignancies are common in

Discussion:

several regions of the world where tobacco use and alcohol consumption is high. The highest rate of oral cancer is found in the developing world where oral cancer with pharynx combined is the fourth commonest site of cancer. In the Western world, squamous cell carcinoma of the head and neck (HNSCC) accounts for more than 90% of all head and neck cancers. 11 Pakistan falls into a high risk head and neck cancer geographical zone, presentation is late and treatment is not optimum.³ Lack of national tumor registry in our country is the main reason for lack of accurate statistical data about prevalence and incidence of cancer. 12 However, regional and institution-based registry systems from different centers are providing scattered but useful information regarding the prevalence of cancer. Centers like AFIP Rawalpindi, IRNUM Peshawar, PMC Faisalabad, QMC Bahawalpur, D.I. Khan, KEMC Lahore, JPMC Karachi and the well-organized Karachi tumor registry are serving the purpose to a great extent.¹²

Present study focuses on cases of head and neck squamous cell carcinomas in one of the largest tertiary care hospitals in Southern-Punjab.

Majority of the patients suffering from head and neck squamous cell carcinoma belonged to rural areas (>75%).a significant number of patients (>70%) had a known active history of tobacco smoking. Our results were consistent with similar findings all over the world. A research conducted by Basu et al. in India suggested that a tobacco habit was significantly correlated with the incidence of HNSCC and persons with current addiction had a 2.17 fold increased risk of cancer development. A case-control study conducted in Germany showed that out of 200 patients suffering from HNSCC, 95.5% were having a smoking history.

Mean age:

In a research conducted by Abdul-Hamid and colleagues mean age of presentation was found to be 51.3 ± 14.9 years (range: 3 - 82years). And there was significant difference between the mean age of male (49.5 ± 15.1) years) and female (45.4 \pm 16.3 years) patients with head and neck cancers. Abuidris and colleagues conducted a study of 314 head and neck cancer cases in Sudan and found that mean age of presentation was 48.79 and median age of 50 years. In our study mean age of the patients was 55.76±7.21 years ranging from 23 to 85 years. Median age was 50 years. Another study from Lahore, Pakistan also revealed similar peak age for head and neck malignancy.¹²

Male to female ratio:

The male to female ratio of head and neck cancer in Nairobi was found to be 2:1.⁷ In a study conducted in India the ratio was found to be 2.9:1.⁶ Our study also suggests a similar male to female ratio of almost 2:1.

Discussion about site-wise frequency of head and neck squamous cell carcinoma is as follows:

Larynx:

Our research showed that the most common affected site in order of frequency was larynx (42.3%). In a study of 89 cases of head and neck cancers in a tertiary care hospital in Nigeria found that larynx cancer constituted 4.5% of cancers. However, Aziz et al. from within the country showed larynx as the most frequent site of head and neck cancer, which was hstologically squamous cell carcinoma, a finding consistent with our results. 12

Hypopharynx

In our research second most common site was hypophayrnx (19.56%). Siddiqui and colleagues found that in Indian state of Bihar hypopharynx carcinoma was the third most common cancer predominately of squamous cell carcinoma type. A study conducted in Nepal found that 10.3% of cases were identified as hypophayrnx SCC. Our study shows significantly higher incidence of hypophyranx SCC it may be due to the reason that the sample size of research conducted by other colleagues is considerably larger.

Oral cavity & tongue:

In our study frequency of oral cavity tumors were the third most common site (15.76%) and tongue as a site of SCC had only 3.26 % frequency. These results are comparable to an Indian research conducted by Bhattacharjee and colleagues in which 32.67% out of TBM were in tounge region and most of them were of SCC type. Other researches also show oral cavity cancers to be a common site of head and neck squamous cell carcinoma. (16-20)

Another large series of 5865 patients from Gulf region showed that oral cancer was 8th commonest and carcinoma arising in pharynx was 7th commonest malignancy and both tumours were relatively preponderant in males with gender ratios of 1.65:1 and 2:1 respectively.²¹ Thus, our findings regarding head and neck squamous cell carcinoma in general and site-wise frequencies of squamous cell carcinoma along with its peak

age and gender distribution are well incoherence with the published reports from within the country and other Asian countries.

Conclusions:

Head and neck squamous cell carcinoma has a peak age in 6^{th} decade of life and twice common in men as compared to women. Most frequent site of HNSCC in Bahawalpur region is larynx.

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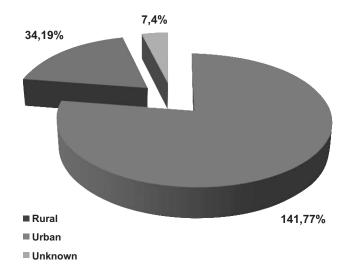


Figure 1. Rural-Urban Distribution of Patients of HNSCC

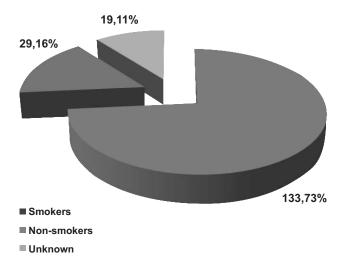


Figure 2. Smoking Status of Patients of HNSCC

Table 1. Histological Grades of HNSCC

Histological Grade	Number of Cases	Percentage
Grade-1	94	51.1%
Grade-2	37	20.1%
Grade-3	49	26.6%
Grade-4	04	2.2%
Total	184	100%

ORIGINAL ARTICLE

Study of Beliefs of Parents About The Etiology and Causes of Cleft Lip and Palate in Their Children

Adeel Haq Chowdry, Saad Aahmed, Noman Karim, Afshan Shaikh, Tooba Khalid, Rasheeqa Mehmood, Hafshah Siddiqui, Rabia Sana, Mariam Mustafa, Asma Mazhar, Sidra Zaheer, Syeda Aimen Anis, Asif Iqbal, Arshi Imran, Tehmina Badar, Muhammad Ashraf Ganatra

Abstract

The purpose of the study was to investigate about the perceptions of parents regarding the etiology and causes of cleft lip and palate in their children and the impact of these beliefs on medical consultation. The study was conducted in **Civil Hospital Karachi** and **Jinnah Post Graduate Medical Center**. A questionnaire was used to collect the required data. The parents of patients under 10 year were investigated about the possible causes. Total 73 parents and grand parents were interviewed out of which 44 (60.3%) mothers belief on solar/lunar eclipse during pregnancy causing this, while 11 (15.1%) on some spiritual involvement. Fathers were also questioned and result were 30 (41.1%) solar lunar eclipse, while 23(31.5) spiritual involvement and the results of grand mothers beliefs were 58 (78.1%) solar/lunar eclipse while 6 (8.2%) punishment of false deeds. The majority of the parents consider solar/lunar eclipse as the main causing factor of the anomaly. Family history of disorder was found positive in 42 (57.5%) cases and 43 (58.9%) marriages were found to be consanguineous. 35 (47.9%) mothers and 56 (76.1%) of the fathers were found to have some sort of addiction.

Key Words: Cleft Lip & Palate, Etiology.

Introduction

Cleft lip and palate is one of the most common congenital anomaly of oro- facial structures. Cleft lip (*cheiloschisis*) and cleft palate (*palatoschisis*), which can also occur together as cleft lip and palate, are variations of a type of clefting congenital deformity caused by abnormal facial development during gestation. A cleft is a fissure or opening a gap. It is the non-fusion of the body's natural structures that form before birth. Cleft Lip & Cleft Palate may occur individually, but frequently both are found in association with each other and other congenital anomalies. IIsolated cleft lip and cleft lip with palate is

Adeel Haq Chowdry, Saad Aahmed, Noman Karim, Afshan Shaikh, Tooba Khalid, Rasheeqa Mehmood, Hafshah Siddiqui, Rabia Sana, Mariam Mustafa, Asthma Mazhar, Sidra Zaheer, Syeda Aimen Anis, Asif Iqbal, Arshi Imran, Tehmina Badar, Muhammad Ashraf Ganatra more common in males, while isolated cleft palate is more common in females.2 World wide prevalence rate is 1 in 700 live births3. They are frequently associated with Congenital Heart Diseases. Problems are cosmetic, dental, speech, swallowing, hearing, facial growth, emotional. Cleft lip occurs when an epithelial bridge fails to unite. Clefts of primary palate occur anterior to incisive foramen while Clefts of secondary palate occur posterior to incisive foramen. Cleft Lip/Palate are an associated feature of over 300 Syndromes. Management of a child with a cleft lip (CL) or palate (CP) necessitates a team effort as these children have multiple problems. They require the skills of a plastic surgeon, speech-language pathologist, pediatric dentist, orthodontist, otolaryngologist, pediatrician, geneticist and an audiologist4. If the cleft does not affect the palate structure of the mouth it is referred to as cleft lip. Cleft lip is formed in the top of the lip as either a small gap or an indentation in the lip (partial or incomplete cleft) or it continues

into the nose (complete cleft). Lip cleft can occur as a one sided (unilateral) or two sided (bilateral). It is due to the failure of fusion of the maxillary and medial nasal processes (formation of the primary palate) Cleft palate is a condition in which the two plates of the skull that form the hard palate (roof of the mouth) are not completely joined. The soft palate is in these cases cleft as well. In most cases, cleft lip is also present. Palate cleft can occur as complete (soft and hard palate, possibly including a gap in the jaw) or incomplete (a 'hole' in the roof of the mouth, usually as a cleft soft palate). When cleft palate occurs, the uvula is usually split. It occurs due to the failure of fusion of the lateral palatine processes, the nasal septum, and/or the median palatine processes (formation of the secondary palate). The hole in the roof of the mouth caused by a cleft connects the mouth directly to the nasal cavity Prevalence in Pakistan is 1.91 per 1000 live births (1 in 523). 42% cases are isolated cleft lip, 24% cases are isolated cleft palate while 34% cases are combined Anomalies.5.In Pakistan Every year more than 9000 children are born with clefts out of which 2000 get their Surgeries done. So each year the load of about 7000 Untreated Cleft Lip\Palate Patient add to the Population. After China, India & Indonesia, Pakistan is at the 4rth place in the occurrence of this anomaly, followed by USA.

Besides the Medical & Scientific Causes of Cleft Lip/Palate, There exist some believes of Parents about many non-Medical causes of Cleft Lip/Palate. Our study is based to find ratio of the Parents Believing on such Scientific or Unscientific causes. Community believes on many cultural attributes towards the causation of disorder which are solar lunar eclipse, god's will, punishment of the sins committed in past life and black magic done by their enemies. These beliefs effect the psychosocial lives of patients and the families. Similar studies were taken place in

Nigeria and they found the prevalence of theses non scientific beliefs in the society.6 Studies were also underwent in rural India and the results found to be 84% parents believe on "God's will" as the leading cause behind this condition? Statistical data about the perception in Pakistani community was lacking on this topic.

It has been reported that the condition is surgically treatable with good prognosis and approximately 3% to 25% children treated will develop absolutely normal speech after primary surgery where as others require multiple interventions throughout the childhood and adolescence8. It has been reported that the leading cause of the CL/P is maternal smoking and alcohol abuse9.

While unnecessary use of drugs and nutritional deficiency during the gestation has also been reported. Studies have shown that supplementation therapy of vitamins and folate during pregnancy could have a protective effect on the congenital anomaly.10

Parents of clefted children avoid any particular antenatal care and after birth treatment in few cases as they regard it supernatural and beyond cure. They consider a divine power giving them a clefted child and in some cases blame themselves or each other for this and consider it punishment of their sins in past lives or regard it as "God's will"11.

It is reported that parents want to know from the healthcare professionals about the disorder and its consequences, about the feeding of these babies and the causes of the cleft and they also want to be told that their child is not in pain due to this condition and this anomaly is not due to their fault.12

By public awareness programs these false beliefs can be corrected which can help the parents and children to get damage repaired and lead a healthy productive life.

Methodology Aims of study

The aim of the study were to

- 1. Find out the ratio of the parents of clefted children who believe on un scientific or super natural causes of the anomaly
- 2. Find out the ratio of grand mothers believing on these causes
- 3. Obtain information from the mother about the pre natal causes that might had lead to anomaly
- 4. Inquire about the smoking and other addictions in mother and father of children with cleft
- 5. Find out how educational level of mother and father are related to their perception
- 6. Inquire about family history of the disease.

Study design

An exploratory-descriptive, quantitative research design was employed, which involved the use of individual interviews.

Inclusion and exclusion criteria

Parents of the children with cleft lip or cleft palate or combined cleft lip and palate not more than 10 years of age at the time of interview were included.

Sampling technique

Purposive sampling

Questionnaire

Interview was taken from parents, after informed consent via questionnaire.

Questions were regarding perception of Mother, Father and Grand Mother about the cause of this Anomaly.

Areas investigated are:

- Family History of Disease.
- Addiction of Father and Mother.
- Gestational Age.
- Nutritional Status.
- Drug History.
- Educational level of Parents.
- Brief physical Examination was done to

assess the Nature, Severity and extent of Anomaly.

Place of study

Civil Hospital Karachi Jinnah Postgraduate Medical Center Al Mustafa trust Hospital.

Sample size

A total of 73 parents of children with cleft lip and palate were investigated after informed consent via questionnaire.

Data analysis

Closed-ended questions were tabulated and analyzed using SPSS. version .14. results are shown with the help of charts, bar diagrams, multiple bar diagrams and pie charts.

RESULTS

A total of 73 parents were investigated at public sector, tertiary care hospital in Karachi. Out of 73 anomalies 47 were isolated cases comprising of 30 cleft lip and 17 cleft palate while other 26 cases having combined anomaly with clefted lip and

	•			_	
		Frequency	Percent		Cumulative Percent
Valid	Solar/Lunar eclipse	44	60.3	60.3	60.3
	Cousin marriage	2	2.7	2.7	63.0
	Punishment of	8	11.0	11.0	74.0
	false deeds				
	God's will	11	15.1	15.1	89.0
	Genetics	5	6.8	6.8	95.9
	Black magic / supernatural	3	4.1	4.1	100.0
	Total	73	100.0	100.0	

palate. There were total 47 unilateral cases and 16 were right sided and 31 were left sided and another 26 cases were found to have bilateral involvement. Parents investigated were having 47(64.4%) male children and 36(35.6%) females. As reported earlier anomaly is more common in males with a ratio of 2:1. 13. 10 years of age were taken cut off for effected children; more than 85% cases were 1-4 years of age with mean of 3-4year age group.

Consanguinity of Marriage

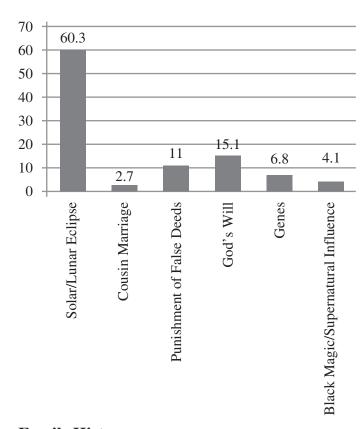
Type of pre marital relation between father and mother were found to be 59% consanguineous and rest non-consanguineous.

Perception of Mothers

Mothers were questioned about their beliefs on etiology of cleft lip and palate in their children and the results were:

What do you (Mother) think is the cause of this disorder in your child?

Table.1

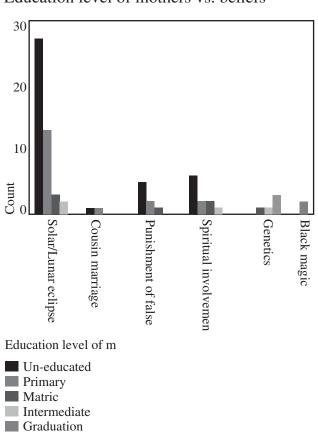


Family History

Family history of anomaly was found positive in 42-57.5% cases. 19 (26%) of total 73 mothers of effected children took folate and/or multivitamins during gestation 12(16%) took some other medications and 31(42.5%) did not took any medication and

rest 11(15.1%) don't remember any such history. 9 out of 73 mothers(12.3%) mothers were found to be addicted to smoking cigarette/beenhi and another 26 (35.6%) mothers used to have paan, chaalia and ghutka. 39(53.4%) Mothers were completely uneducated and 20 mothers (27.4%) attended primary schools while other 14(19.2%) attended secondary and above education. It was found that mothers who are more educated used to think more scientifically than uneducated ones, results are depicted in figure 1.

Fig.1 Education level of mothers vs. beliefs



what do you think is the cause of this disorder in your child?

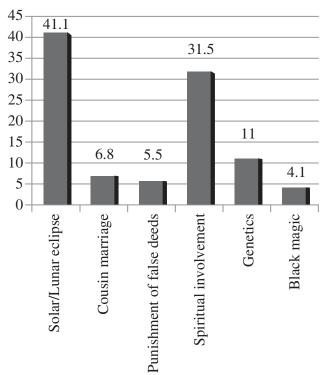
Perception of Fathers

Fathers were investigated regarding their believes on the etiology of anomaly and the results were found to be:

Being a father, what do you think is the actual cause of this disorder?

Table 2.

		Frequency	Percent		Cumulative Percent
Valid	Solar/Lunar eclipse	30	41.1	41.1	41.1
	Cousin marriage	5	6.8	6.8	47.9
	Punishment of	4	5.5	5.5	53.4
	false deeds Spiritual involvement	23	31.5	31.5	84.9
	Genetics	8	11.0	11.0	95.9
	Black magic Total	3 73	4.1 100.0	4.1 100.0	100.0



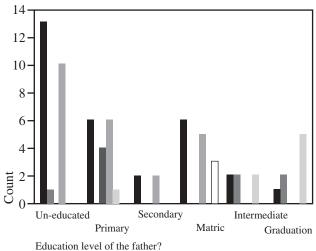
- Solar/Lunar eclipse
- Cousin marriage
- Punishment of false deeds
- Spiritual involvement
- Genetics
- ■Black magic

30(41.1%) out of 73 fathers were found to be smokers while another 26(37.6%) used to take paan, chalia ghutka or maenpuri. 24 (32.9%) fathers were completely un educated while 17(23.3%) and 32(44.8%) attended primary and secondary or above educations. Same trend of more scientific beliefs with

increasing level of education were also found in fathers this comparison is depicted in figure.2

Socio Economic Groups

Most of the families investigated were belong to lower socio economic group 45 (61.6%) and lower middle socioeconomic group 23 (31.5%) while only 5(6.8%) belong to middle class or well to do families. It can be ascertained from the result that as financial status of family effects antenatal and post natal care, uses of folates or multivitamins and awareness about hazard of smoking, it may be indirectly related to high incidence of congenital anomalies.



Being a father, what

- Solar/Lunar eclipse
- Cousin marriage
- Punishment of false deeds
- Spiritual involvement
- Genetics
- ☐ Black magic

Fig.2 Education level of father vs. beliefs

Perception of Grand Mothers

Grand mothers were also inquired where present or asked from mother or father about grand mother's perception on etiology of CL/P and the results found are depicted in Table.3.

Being a grand mother, what do you think is the cause of this disorder in your grand child?

Table .3

		Frequency	Percent		Cumulative Percent
Valid	Solar/Lunar eclipse Punishment of	57	78.1	78.1	78.1
	false deeds	6	8.2	8.2	86.3
	God's will	6	8.2	8.2	94.5
	Black magic / supernatural	4	5.5	5.5	100.0
	Total	73	100.0	100.0	

Discussion

- Our study provides statistical data about the perception of community especially parents of children with cleft lip and palate.
- According to results majority of the parents consider solar/lunar eclipse , God's will and supernatural causes
- Similar study was done in Nigeria and the results were God's will, supernatural causes and self blame in order of occurrence.14
- According to a study in India they found 84% due to God's will and 10% sins committed, as a social perception.15
- Although scientific studies proved the genetic and environmental causes behind the anomaly.
- It is also evident through our study that more of the Grand mothers beliefs on such scientific causes followed by mothers and then fathers, so awareness is increasing with time
- Due to these false beliefs a feeling of self guilt is found in some mothers and fathers which has its psychological consequences.

Recommendations

- It is observed that more educated parents used to think more scientifically.
- Mass education programs should be

- started to educate community about true causes.
- Mothers should be educated about smoking as a leading cause in anomaly.
- Stress should be given to nutritional adequacy during pregnancy.
- Use of folates/ multivitamins should be encouraged by mothers.
- Parents of patients should be counseled about availability of surgical treatments.
- Psychological counseling of self blaming parents.
- Public sector arrangements should be increased to surgically correct the condition.
- More emphasis should be laid on rural population.

Conclusion

Our study provide statistical prove of the non scientific beliefs found in parents of the patients of cleft lip and palate, it is a avoidable condition and we can help population by working on the recommendation made above.

Limitations

Ouestionnaire based interviews were taken from 73 parents of children with cleft lip or palte or both. In some cases both parents were not available so we had to rely on one parent, we asked the available one about the perception of other. In the same way grand mothers were present only in few cases so we took her view directly but in other cases mother or father were asked to tell grand mothers view on the anomaly. Study duration was short so could not got the desired number of sample size. Some information inquired was from past history of mother or father and there may be a recall bias. Study on perception of parents on cleft lip or palate were not taken place in Pakistan so we can't compare our study with other studies with in our local dynamics. These were few limitations in our study design and conduction.

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Sturge-Weber Syndrome – Case Series

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SUMMARY. Objective: The author reports six cases of Sturge-Weber Syndrome.

Setting: Plastic Surgery Ward 18, Liaquat University Hospital, Jamshoro.

Method: Descriptive presentation of six cases of Sturge-Weber Syndrome characteristics of the patients, surgical procedures and outcome noted.

Results: Results of this syndrome are usually dependent upon case to case.

Conclusion: This is a very rare congenital anomaly and hence its awareness to the plastic surgeons, neurosurgeons and eye surgeons is important.

Key Words: Sturge-Weber Syndrome, port wine stain, eye problems.

Nevus flammeus is the discoloration of the face which mimics the red colour of port wine. In Sturge-Weber Syndrome (SWS), the port wine stain is noted at birth and generally occurs on the same side as the excessive blood vessel growth (leptomeningeal angiomatosis) in the brain accompanied by the accumulation of calcium (intracranial calcifications). The port wine stain primarily occurs along the distribution of the trigeminal nerve on the face, though in some cases it may not appear at all. Although the discolouration usually affects only one side of the face, a slight extension over the midline occurs in fifty per cent of the cases. The port wine stain tends to deepen in colour with age, and nodular elevations may also develop. Port wine stains on lips and mucous membrane lining of the mouth are present in approximately 25 per cent of the patients¹.

Seizures occur in more than half of the patients, usually beginning during the first year of life². These tend to become more

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frequent and severe with age. A form of paralysis (hemiparesis or hemiplegia) occurs in 30% of patients. Mental disturbances occur in fifty to sixty per cent of patients.

Seventy per cent of patients have associated eye problems on the same side of the face as the port wine stain and clumps of blood vessels (leptomeningeal angiomatosis) with intracranial calcifications. The eye problems do not tend to occur in Sturge-Weber patients who have no port wine stains. In many cases, the eye lesion is a glaucoma, typically present at birth and accompanied by the enlargement of the eyeball (buphthalmos), but it may begin anytime before or after the age of two years³. The exact cause of SWS is not known. In some, it is believed to be an autosomal dominant hereditary disorder. It may also be caused by trauma or viral infection sustained during early gestation.

Patients & Methods

Six cases of Sturge-Weber Syndrome, three males and three females are presented. All the cases were above the age of 30 years. Five cases presented with oro-facial port wine stain angiomatosis with cutaneous and mucous lesions localised in the area of distribution of the first and second branch of trigeminal nerve in association with right upper and lower lip and cheek hypertrophy.

All cases had drooped cheeks and lower lips. Of these five cases, one male patient presented with secondary glaucoma ending in blindness of one eye. One case presented with forehead angiomatosis and history of seizures. Patients with blindness and seizures were treated conservatively.

Surgical treatment was offered in four cases. In three patients, two females and one male, with excessive drooping of the lower lip and cheek, excessive tissues of the lower lip along with the cheek were excised and the defects closed by primary reconstruction. One female patient, presenting with nodular papillomatosis of cheek was treated by 95% excision of the lesion and reconstruction of the cheek by advancement of a rotation flap.

Case 1: (Fig. 1 & 2) Female with lower lip hypertrophy, right cheek and right neck port wine stain. Treated with lip reduction.

Case 2: (Fig. 3) Female with lower lip hypertrophy and left cheek port wine stain. Treated by lip reduction.

Case 3: (Fig. 4) Male with lower lip hypertrophy, right cheek, neck and upper chest port wine stain. Treated by lip reduction.

Case 4: (Fig. 5 & 6) Female with nodular papillomatosis of the left lower lid, infraorbital area and left temple. Treated by excision and cheek rotation flap.

Case 5: (Fig. 7 & 8) Male with upper lip hypertrophy and port wine stain of the left cheek. Associated glaucoma causing blindness of the left eye.

Case 6: (Fig. 9) Male with left forehead angiomatosis and history of seizures. Treated medically for epilepsy.

Results

Four patients operated in this series presented with hypertrophy of the upper and lower lips and cheek leading to facial asymmetry and dento-skeletal malocclusion. At surgery, the excessive tissue was excised and the defect was closed primarily in three cases while in one patient reconstruction of the cheek had to be carried out by the advancement of a rotation flap. At follow-up, all patients had improved looks with resultant elation of mood and enhanced self-confidence. Reduction in the drooping of the cheek and lips resulted in a competent oral sphincter and complete cessation of the dribbling of the saliva. It also theoretically prevented the development of future complications like mucosal ulceration, infection and haemorrhage.

One patient in this series presented with associated seizures which was treated conservatively by the neurosurgeon with good response.

Discussion

The Sturge-Weber syndrome consists of a unilateral port-wine haemangioma of the skin along the trigeminal distribution and is a c c o m p a n i e d b y a n i p s i l a t e r a l leptomeningeal angioma causing seizures. Glaucoma is present in approximately half of the cases⁴. In our series of six patients, four patients presented with mucocutaneous lesions with no associated ocular problems or seizures. Of the remaining two cases, one patient presented with glaucoma leading to blindness and one presented with seizures.

The advent of the pulse dye laser therapy has dramatically improved the outcome in patients with port wine stain. However, patients with Sturge-Weber syndrome present with bulky haemangiomas of the cheeks and lips which require debulking surgery to achieve cosmetic and functional improvement.

Associated glaucoma has been widely reported to be present in 50% of the patients with Sturge-Weber syndrome. This is quite contrast to our series where only one patient presented with eye problem. This can be related to the small number of cases in this study.

Patients with Sturge-Weber syndrome often present with seizures during the first year of life. Currently, only patients with clinically significant seizures who do not respond to medical treatment are candidates for early epileptic surgery⁵. The only case in this series with associated seizures, however, presented late and responded to conservative treatment.







Fig 2



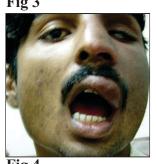




Fig 4

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ORIGINAL ARTICLE

Composite Helix Chondrocutaneous Grafts for Reconstruction of the Soft Triangle

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SUMMARY: Nasal tip reconstruction is a complex undertaking. However, the restoration of soft triangle to mimic the opposite side is extremely difficult. Small nasal defects especially resulting from human bite do not warrant staged forehead flaps. Local flaps are usually not sufficient. We present our experience of six cases in which we used composite grafts consisting of small pieces of cartilage wrapped in its cutaneous envelope for reconstruction of the tip of nose. Four of the grafts successfully took while one was totally lost. One patient required some secondary augmentation. The resulting donor defect was primarily closed with an acceptable scar.

Key Words: chondrocutaneous grafts, nose reconstruction, helical grafts, soft triangle

Technique and patients

Patients were selected on the basis of the size and shape of the defect of the tip of the nose. All defects with transverse measurements less than 15 mm and maximum length less than 20 mm were chosen for the study. All smokers were excluded from selection for this procedure.

The procedure was carried out under local anaesthesia in adults using a regional block rather than local infiltration to avoid distortion of the defect site.

The defect was debrided to healthy tissue even if it required trimming of the alar cartilages. The aim was to create a well vascularised tissue bed for the graft.

A tracing of the contralateral side of the nose was made on a sterile foil from a suture pack. The template for the graft required was made by turning it over to create a mirror image of the defect.

A slightly oversized composite graft was harvested atraumatically from the root of the

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Obaidullah FRCS, Consultant Plastic Surgeon Rehman Medical Institute, Peshawar Correspondence to Dr. Obaidullah. Paper received November 2003. Accepted 31 December 2003 helix of the ear. The under surface of the graft was delicately stitched to the nasal lining with continuous 6/0 chromic catgut. However, the skin stitches were placed half buried in the graft and tying them on the donor skin side to provide maximum contact without any compromise tension on the graft (buried horizontal mattress). The graft was further stabilised with steristrips.

The procedure was carried out as a day case. Postoperatively the patients were asked to remain indoors. Air conditioning or drought from fans was prohibited and they were encouraged to drink plenty of hot liquids so as to avoid cooling the graft as we believe that a warm environment increases circulation of the donor area and helps the graft vascularise early. This course was continued for five days. Sutures were removed on the fifth postoperative day.

Results

This study was carried out over a period of about three years from January 2001 to October 2003. A total of six patients were treated. Five of them were adult males. The only female patient happened to be a child of 12 years. All the male patients had injury caused by human bites. None of them could produce the missing part at the time of presentation to plastic surgery services. The

only child had attributed the defect to some kind of infection in early childhood. Three of the five male adults had surgery done elsewhere once or more times with unsatisfactory results. Two had come in the acute phase. The defects were recreated in patients who had healed wounds or previously repaired defects. In all cases, ipsilateral root of helix was used as a donor site. In five patients the donor site was primarily closed along the length of the defect. This resulted in reduction of the root of helical rim but this was perfectly acceptable to the patients. One early patient had his donor defect repaired transversely which this resulted in slight cupping of the auricle though later the scar stretched.

The graft in the child was completely lost. She remained in the hospital for five days but these were summer days and the hospital central air-conditioning was producing chilling temperature. We have no proof that room temperature had any adverse effect on the take of the graft.

One patient had some loss of the graft. He wanted a repeat surgery. He is waiting to be operated sometime next year. Four patients were very happy with the results. One patient had hyperpigmentation of the graft but the shape was perfectly symmetrical and gave good appearance. Two of these three patients are presented with pre and post operative photographs (Figures 1-6).



Fig. 1, Patient I, frontal view



Fig. 2, Patient I, lateral view before repair



Fig. 3, Patient I, frontal view 3m postop



Fig. 4, Patient I, worms eye view 3m postop



Fig. 5, Patient II, defect before surgery



Fig. 6, Patient II, 5 days after surgery

Discussion

Reconstruction of defects of the tip of the nose is always challenging¹. However, to recreate the soft triangle and the alar rim is extremely difficult. Although the former consists of only two layers of skin and a very thin layer of areolar tissue², reconstruction with cartilaginous helical rim of the external ear gives a satisfactory result. The normal shape of the alar-columellar junction is a rounded smooth curve, which is visible from not only the frontal view but also from the lateral aspect³. The root of helical rim of external auricle presents perfect shape for the reconstruction of soft triangle of the tip of the nose, including some of the alar margin. The colour match is also satisfactory⁴. We feel that careful handling of the graft during harvest and suturing adds to safety of the take. Various methods have been described to stabilise the graft including tie over dressing and splints from dental material⁵. We, on the contrary, used simple steristrips to stabilise on top of careful atraumatic suturing. Although

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some authors described cooling of the graft with ice packs⁶, we differ in this respect that it also hampers revascularisation. This has not adversely affected outcome in our series as we continued with keeping the patient indoor and warm. This series is too small to arrive at any conclusion about the effects of the environmental temperature. However, we continue to practice keeping our patients hypervascularised by high fluid intake and confinement to indoors.

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All material submitted for publication should be sent exclusively to the Pakistan Journal of Plastic Surgery. Work that has already been reported in a published paper or is described in a paper sent or accepted elsewhere for publication should not be submitted. Multiple or duplicate submission of the same work to other journal should be avoided as this fall into the category of publication fraud and are liable for disciplinary consequences, including reporting to Pakistan Medical & Dental Council and Higher Education Commission. A complete report following publication of a preliminary report, usually in the form of an abstract, or a paper that has been presented at a scientific meeting, if not published in full in a proceedings or similar publication, may be submitted. Press reports of meetings will not be considered as breach of this rule, but additional data or copies of tables and illustrations should not amplify such reports. In case of doubt, a copy of the published material should be included with a manuscript to help the editors decide, how to deal with the matter.

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Material for Publication.

The material submitted for publication may be in the form of an Original research (Randomized controlled trial - RCT, Metaanalysis of RCT, Quasi experimental study, Case Control study, Cohort study, Observational Study with statistical support etc), a Review Article, Commentary, a Case Report, Recent Advances, New techniques, Debates, Adverse Drug Reports, Current Practices, Clinical Practice Article, Short Article, KAP (Knowledge, Attitudes, Practices) study, An Audit Report, Evidence Based Report, Short Communication or a Letter to the Editor. Ideas and Innovations can be reported as changes made by the authors to an existing technique or development of a new technique or instrument. A mere description of a technique without any practical experience or innovation will be considered as an update and not an original article. Any study ending four years prior to date of submission is judged by Editorial Board for its suitability as many changes take place over the period of time, subject to area of the study. Studies more than four years old are not entertained. JCPCP also does not accept multiple studies/multiple end publications gathered/derived from a single research project or data (wholly or in part) known as 'salami slices'.

Original articles should normally report original research of relevance to clinical medicine. The original paper should be of about 2000-2500 words excluding abstract and references. It should contain a structured abstract of about 250 words. Three to 10 keywords should be given for an original article as per MeSH (Medical Subject Headings). There should be no

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Review article should consist of critical overview/analysis of some relatively narrow topic providing background and the recent development with the reference of original literature. It should incorporate author's original work on the same subject. The length of the review article should be of 2500 to 3000 words with minimum of 40 and maximum of 60 references. It should have non-structured abstract of 150 words with minimum 3 key words. An author can write a review article only if he/she has written a minimum of three original research articles and some case reports on the same topic.

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Ethical consideration regarding the intervention, added cost of test, and particularly the management of control in casecontrol comparisons of trials should be addressed: multicentric authors' affiliation may be asked to be authenticated by provision of permission letters from ethical boards or the heads of involved institutes.

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Photographs, X-rays, CT scans, MRI and photomicro-graphs should be sent in digital format with a minimum resolution of 3.2 mega pixels in JPEG compression. Photographs must be sharply focused. Most photographs taken with a mobile phone camera do not fulfill the necessary

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References should be numbered in the order in which they are cited in the text. At the end of the article, the full list of references should give the names and initials of all authors (if there are more than six, only the first six should be given followed by et al). The authors' names are followed by the title of the article; title of the journal, abbreviated according to the style of the Index Medicus (see "List of Journals Indexed," printed yearly in the January issue of Index Medicus); year, volume and page number; e.g.: Hall RR. The healing of tissues by C02 laser. Br J Surg 1971; 58:222-225 (Vancouver style). Reference to books should give the names of editors, place of publication, publisher, year and page numbers. The author must verify the references against the original documents before submitting the article. The Editorial Board may ask authors to submit either soft or hard copy (full length) of all the articles cited in the reference part of the manuscript.

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Abstract of an original article should be in structured format with the following subheadings:

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- ii. Design.
- iii. Place & duration of study.
- iv. Patients & Methods.
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- vi. Conclusion.

Four elements should be addressed: why was the study started, what was done, what was found, and what did it mean? Why was the study started is the objective. What was done constitutes the methodology and should include patients or other participants, interventions, and outcome measures. What was found is the results, and what did it mean constitutes the conclusion. Label each section clearly with the appropriate subheadings. Background is not needed in an abstract. The total word count of abstract should be about 250 words. A minimum of 3 Key words as per MeSH (Medical Subject Headings) should be written at the end of abstract. A non structured abstract should be written as case specific statement for case reports with a minimum of three key words.

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This section should include the purpose of the article after giving brief literature review strictly related to objective of the study. The rationale for the study or observation should be summarized. Only strictly pertinent references should be cited and the subject should not be extensively reviewed. It is preferable not to cite more than 10 references in this segment. Pertinent use of reference to augment support from literature is warranted which means, not more than 2 to 3 references be used for an observation. Data, methodology or conclusion from the work being reported should not be presented in this section. It should end with a statement of the study objective.

Methods.

Study design and sampling methods should be mentioned. Obsolete terms such as

retrospective studies should not be used. The selection of the observational or experimental subjects (patients or experimental animals, including controls) should be described clearly. The methods and the apparatus used should be identified (with the manufacturer's name and address in parentheses), and procedures be described in sufficient detail to allow other workers to reproduce the results. References to established methods should be given, including statistical methods. References and brief descriptions for methods that have been published but are not well-known should be provided; only new or substantially modified methods should be described in detail, giving reasons for using them, and evaluating their limitations. All drugs and chemicals used should be identified precisely, including generic name (s), dose(s), and route(s) of administration.

For statistical analysis, the specific test used should be named, preferably with reference for an uncommon test. Exact p-values and 95% confidence interval (CI) limits must be mentioned instead of only stating greater or less than level of significance. All percentages must be accompanied with actual numbers. SPSS output sheet must be attached with manuscript to clarify results (p-values).

Results.

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