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INTRODUCTION

Mr. Vice Chancellor, Deputy Vice Chancellor, Registrar, Provost College of Health Sciences, Deans of Faculties, Directors, Heads of Departments, Great Ladokites, distinguished guests, ladies and gentlemen.

I stand before you today to pay the debt I owe this University and our community, like every other academic who has succeeded to get to the pinnacle of having a Professorial chair. This is a testimony of the miraculous work that only God Almighty can do in the life of a man. It is therefore a great pleasure for me to be permitted by Mr. Vice Chancellor, on behalf of the Faculty of Clinical Sciences, to deliver this second inaugural lecture from the Department of Surgery, 3rd from the Faculty of Clinical Sciences, 5th from the College of Health Sciences and 21st from our great University.

THE BEGINNING

My desire to be a Medical Doctor was borne out of an experience. I was a village boy at Sagba's village, Ikire, where a "singer player" purchased jointly by a group of young men used to sing every evening after the day's work to the amazement of those of us, young boys and girls, in the village. Then, I would sit down patiently to listen to this wonder "machine", playing inside which were men like Haruna Ishola, Yusuf Olatunji, Chief Sunny Ade and a host of others. I would cram their songs from the beginning to the end, including the rhythm of the drums and instruments, and then would sing round the village to the amazement of the villagers. A number of the villagers alive today still wonder why I did not end up being a musician.

But luck ran against me one evening as I listened with rapt attention and had one of my legs trapped in between bamboos used to make a bench upon which several people sat. I could not walk home. I later developed cellulitis for which I had several injections of Procaine penicillin by an uncle who was a quack doctor in a neighboring village. Memory of his care assisted me in deciding that I must take care of people like he did. Thanks to God who made the glory of the latter house to surpass the former.

Mr. Vice Chancellor, my choice of specialty even as a medical student had always been Surgery. I believed that this was the only medical specialty that allows you to use your hand as you use your brain to treat pathology. Making a choice among the several different specialties of Surgery during my internship at the University College Hospital, Ibadan was another task. I had gone through General surgery and was faced with several dying patients with terminal cancerous diseases. I got disappointed and briefly toyed with the idea of being a Gynaecologist. The thought of treating only women all my life chased me back to Surgery.

Rotating through Plastic Surgery as an intern brought me to a man I considered an "ideal" surgeon, willing to share knowledge in the most humane manner compared with my perceived abrasiveness of the other surgeons. His name is Prof. O. M. Oluwatosin (currently the Deputy Vice chancellor of University of Medical School, Ondo). He had used a nasolabial flap in reconstructing the nose of a middle aged woman who had presented with an old cancrum oris. Following removal of the dressing on the fifth day, the woman looked at herself in a mirror, danced from one end of South West 1 Ward of University College Hospital, Ibadan to the other, in appreciation of the restoration that had occurred to her deformed face.

Another man in the ward called Prof. Oluwatosin his "second Jesus". He had suffered from osteomyelitis for decades and had many unsuccessful treatments. Prof. Oluwatosin transposed soleus muscle flap into the bone cavity and the wound healed perfectly. I was amazed that a surgical specialty could give so much joy to people! "Eureka" was the song on my lips. I decided I had gotten to my destination. I want to thank God, Mr. Vice Chancellor, that I made that choice and also thank my teacher and mentor, Prof. Oluwatosin for providing such an exemplary leadership to me personally and to many others in the specialty.

Following my residency training at National Orthopaedic Hospital, Enugu and University College Hospital, Ibadan, I had further exposure to training in other places including a Smile train sponsored fellowship training at the Charles Pinto Centre for Craniofacial Surgery, Kerala, India, under the renowned Cleft Surgeon, Prof. A.S. Adenwalla and at the Ganga Hospital Coimbatour, India under Dr. Raja Sabapathy.



Figure 1: Learning from the guru of cleft surgery, Prof. A.S. Adenwalla, Kerala, India



Figure 2: With Dr. Raja Sabapathy at Combantoir, India.

With the Fellowship award of the American Plastic Surgery Education Fund, I was able to further receive some training at the Connecticut Children Hospital, Hartford, Connecticut USA, under Dr. Charles Castiglione and also had a laboratory research work on Keloid Fibroblasts at the University of Connecticut Health Center, Connecticut, USA with my collaborator on keloid gene project, Prof. Ernst Reichenberger.



Figure 3: With Prof. Reichenberger (left) and Dr. Chen I-Pen (right) at Connecticut University laboratory, USA

I received the British Association for Plastic, Reconstructive and Aesthetic Surgery (BAPRAS) Fellowship Award which enabled me to spend some months at the Queen Victoria Hospital, East Grinstead, as well as Chelsea and Westminster Hospital, in London, United Kingdom. I had further training and research exposure for another year at the Nationwide Children's Hospital, Columbus Ohio, USA, following the reception of the Greif Fellowship, being the first African to receive this. I also served as an adjunct Assistant Professor of Plastic surgery to the Department of Plastic Surgery of Ohio State University during my one year sabbatical leave at Columbus, Ohio, USA.



Figure 4: With Dr. Richard Kirschner and staff at Nationwide Children's Hospital, Columbus, Ohio, USA.

I came into this University and LAUTECH Teaching Hospital, Osogbo as the first plastic surgeon and established the Plastic surgery Unit and a burn unit. Today, I take care of men and women; children and aged; this gives me a lot of experience, exposure and joy.

Mr. Vice Chancellor, the inspiration for the topic of today's inaugural lecture was derived from an inaugural lecture delivered by a great mentor and teacher, Prof. O.G. Ajao, titled "Snooping about inside the Belly" which I sat quietly to listen to, as a medical student in February 1992. I had a deep thought about today's inaugural and it dawned on me that if Prof. Ajao as a General surgeon had been "snooping inside the belly" because he worked majority in the abdominal cavity, my work has been in carving, shaping and re-shaping the human form like a sculptor. You do a little, and you still want to do a little more, shaping and re-shaping till you and the patient are satisfied. The great sculptor started the work which the

lesser sculptors have tried to emulate. Hence the title "In the similitude of the sculptor: Carving and re-shaping the human form".

SCULPTING

Mr. Vice Chancellor, Sculpture or sculpting is the act of creating figures or designs in three dimensions, creating by shaping stone or wood or any other hard material. It may involve chiseling, modelling and casting. Durable sculptural processes originally used carving (the removal of material) and modelling (the addition of material, such as clay). A wide variety of materials may be worked on by carving, assembled by welding or modelling.

The western tradition of sculpture began in Ancient Greek. During the middle ages, Gothic sculpture represented the agonies and passion of the Christian faith. The revival of classical models in the Renaissance produced famous sculptures such as Michelangelo's David. Materials used in sculptures of female Venus figurines such as the Venus of Willendorf (24,000-22,000) were found across central Europe. Sophisticated sculptures were produced in Mesopotamia, Ancient Egypt, Ancient Greece, Ile-Ife, as well as the old Oyo empire.

The sculptor first conceives or imagines the image he desires to have in his mind. He then sets out to plan the height, the width, the shape, as well as the general appearance of the sculpture. The wooden sculpture is usually made by picking a wood of high quality, and is then cut into the desired shape, chiseled to get the desired contour and appearance, moulding different shapes of the eyes, the cheek, and indeed every part of the human body.



Figure 5: Sculpture from Ile-Ife with hypertrophic tribal marks.

Often, the sculptor puts a mark that shows the origin of the sculpture. For example, various sculptures found in Ile-Ife and Oyo reveal the kinds of tribal marks that were common while the sculpting took place at the different communities.

WHAT IS PLASTIC SURGERY?

The word "plastic" in Plastic surgery is derived from the Greek word "plastikos" which means to "mould", "sculpting" or "give form". It is concerned with the correction or restoration of form and function with several sub-specialties.

Self-improvement is essential to the nature of mankind. Treatment for the plastic repair of a broken nose was first mentioned in the Edwin Smith Papyrus and some of the oldest known surgical treatise dated to the old kingdom from 3000 to 2500BC. India has contributed significantly to Plastic surgery.



Figure 6: Sushruta doing Ayurveda medicine, one of the pioneers of Plastic Surgery who lived in India around 600BC

Most plastic surgery developments occurred during the late 1800s and early 1900s wars, with the awful injuries wars often inflict on its participants. In fact, it was the "war to end all wars", World War 11, that catapulted plastic surgery into a new and higher realm. A lot of soldiers who survived the war came out with severe and very deforming scars which needed to be fixed before they could fit back into the society.

Various flaps were raised on various patients who were in the hospital for several months and years. Indeed, a number of these patients were admitted to Queen Victoria Hospital, East Grinstead, United Kingdom, had series of reconstruction over several years and died in the hospital. The names and pictures of many of these veterans are still kept in Queen Victoria Hospital where I had a short training. They belong to the 'guinea pig club' and a lot of reconstructive procedures developed from them, with surgeons using them to shape and re-shape the human body and form today.



Figure 7: The "Guinea pig club" WWII burn victims under McIndoe's care at Queen Victoria Hospital with various stages of nose reconstruction.

Human form is the visible shape or configuration, a particular way in which the human exists or appears. The human body is a very complex structure with complex muscles, bones, nerves and vessels while the skin serves as a very important cover to protect and ensure that these complex anatomic structures function optimally. Invaders therefore intrude and wage serious war on the underlying complexity once the skin is removed or destroyed either by burn, gunshot, accidents, or even chemicals.

SCULPTING: THE BEGINNING, THE PROCESS AND THE PROGRESS

The sculptor of all sculptors "moulded a man from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being" (Genesis 2:7) thereby being the only one who creates

something from nothing. "And the Lord God caused a deep sleep to fall upon Adam, and he slept and he took one of his ribs, and closed up the flesh instead thereof" (Genesis 2:21). From a single rib, he formed a complete woman. This is a feat that has not, and may never be reached by any man. However, with this, foundation was laid for the Plastic surgeon.

"For every creature of God is good" (1 Timothy 4:4). Sometimes however, insults are received from the effects of congenital anomalies (birth defects), genetic induced anomalies, trauma, accidents, cancerous growth and development as well as ageing. Frequently too, a man or woman desires an improvement, including even change of sex endowed him by his father's donation of X or Y gene. It is the resulting deformities and defects from these assaults and insults that the plastic surgeon tries to carve, shape and re-shape.

The plastic surgeon sometimes takes tissues from one part of the body to another. Indeed, he robs Peter and pays Paul but ensures, with his knowledge of Anatomy and skills of surgical precision, that Peter is strong enough to withstand the robbery. He is not limited by any boundary of age, sex, region or parts of the body. He moulds the body of a male, as he does of a female; the head, as of the toes; the mouth, as he does with the nose. He sculpts the breast as he moulds the genitalia of both sexes. The plastic surgeon is therefore the "General Surgeon" as there is no area of the body he is restricted to, or prevented from performing his sculpting activities.

Charles Pinto of Jubilee Mission Hospital Thrissure, India, put it very aptly when he said: "the plastic surgeon is a general surgeon with a hobby, and that hobby lies in the aesthetic appreciation of the beauty and symmetry of the normal human form. Besides, he has the burning desire to heal all the internal scars that external wounds do cause."

The plastic surgeon is an artist with a taste and yearning for beauty and a scientific mind. He imagines, draws in his mind from his depth of knowledge and experience; and then on the body, to address a pathology with surgical accuracy. He does this in any part of the human body—sculpting, carving, shaping and sometimes re-shaping the body with a

view to bringing out a functional and aesthetically appealing form. Often, these take several sessions of surgical procedures.

He first considers what the patient desires and places this desire besides what is achievable. Plastic surgery uses human tissues ranging from skin, hair, muscles, nerves, tendons, fats, cartilages to bones, in moulding, shaping or sculpting the body. He uses his knowledge of science to plan with mathematical accuracy, like an Architect or a builder. He then sets at either re-arranging a local tissue or harvesting tissue from other part of the body. He cuts a tissue, "chisels" it like the sculptor and sets it at the desired position, removing and adding as the case may require. He uses a wide range of principles and tools available to him to reconstruct, recreate, and transfer. Flaps and grafts are two major tools in the armamentarium of the plastic surgeon in ensuring a better function and, or appearance of the body.

He sometimes uses plastic appliances and other materials in the work of shaping. For example, he uses silicone implants in breast surgery. Unlike the sculptor who chooses his desired object or image to sculpt, the patient of the plastic surgeon presents to him with specific demands or desires. Some of the patients hunt the plastic surgeon daily until they get something satisfactory. In the case of the sculptor, the sculpture does not complain!

In many cases, the patient tends to appreciate the work of the plastic surgeon better as the scars settle and bulk gives way to better appearance. Sir Harold Gillies once said: "time, although the plastic surgeons' most trenchant critic is also his Greatest ally". Things tend to settle with time.

Several aspects of plastic surgery exist, all making use of principles that assist in shaping and re-shaping the body. These include Reconstructive surgery, aesthetic or cosmetic surgery with which the specialty is well known in the media, microvascular surgery, craniofacial surgery, hand surgery, burn care, and many others.

Plastic surgery is closely associated with photography and every Plastic surgeon is expected to possess this skill. Pre-operative and post-operative

pictures assist the plastic surgeon and the patient to compare where they are, to where they have come from. They are able to appreciate what the patient looked like before the surgery and what he looks like thereafter. This is because often, the patient forgets where the journey began in anticipation for, sometimes, un-achievable expectations. Clinical photography assists the plastic surgeon in educating his patients and of course in discussing his works with colleagues through publications (Olaitan and Oseni, 2011, Olaitan 2011). Photography is therefore a strong instrument in Plastic and Reconstructive Surgery.

I will therefore urge, Mr. Vice Chancellor, to bear with me as I show some of our sculpting activities as plastic surgeons. Let me warn sir, that some of these pictures may be graphic!

The plastic surgeon is involved in moulding several parts of the head and neck through several procedures including for trauma, cosmetics and reconstruction for cancer. He is involved in surgery for congenital (birth) anomalies especially cleft lip and palate surgery.

Breast surgery is an important area where the plastic surgeon is very versatile. He reduces excessively large breasts (reduction mammoplasty), enhancing small breasts (augmentation mammoplasty), re-shaping a drooping breast (mastopexy) and reconstructing breast (breast reconstruction) following breast removal (mastectomy) for cancer or other diseases of the breasts.



Figure 8: Breast augmentation



Figure 9: Male breast reduction



Figure 10: Breast reduction of enlarged breast (pre and post operative)



Figure 11: Left Breast reconstruction following mastectomy (breast removal for disease) (Pre and post operative)

He is also involved in abdominal wall (abdominoplasty or by liposuction) surgery and body sculpting or contouring.



Fig 12: Tummy tuck preoperative and post operative pictures

Several congenital anomalies of the hand like syndactyly, polydactyly, microphalanx, absence of one part or another, give the plastic surgeon a place to demonstrate his expertise of sculpting.

Body defects are commonly created following congenital problems, burns, trauma, open wounds, post-irradiation, infections, as well as excision of large tumours. The plastic surgeon is the master for such large defects in any part of the body, sculpting and restoring form and function to the affected body parts.

Buttock augmentation for flat buttocks and for celebrities who desire a lift of their buttocks also receive the attention of the plastic surgeon. Both the male and female external genitalia are areas of sculpting for him. Other cosmetic vaginal surgeries like restoration of virginity by hymenoplasty, vaginal wall narrowing, or rejuvenation are also in the area of reshaping for this sculptor. Hypospadias as well as other traumatic and cancerous problems to the penis are also handled by him.

He assists in moulding, shaping and carving a new vagina, breast and body in a man desiring to change his sex to female and also penile reconstruction for women desiring to change to men. Such patients are however routinely made to go through a number of processes including

psychological assessment before embarking on such irreversible processes.

Scar revision is another aspect of plastic surgery and this includes surgical revision of scars including tribal marks.

He can reduce or minimize scars and sometimes hides scars but scars are difficult to remove.

With Microvascular surgery, vessels from transferred tissues are joined to that of recipient through the aid of microscope. This is still in its infancy stage in Nigeria. Hand digits, fore arm or legs can be joined together when severed through accidents. Indeed, the entire face has been transplanted with the help of microvascular surgery.

He is also involved with the management of skin cancer and he continues to look for new and wider areas of sculpting.

MY CONTRIBUTION TO SCULPTING.

Mr. Vice Chancellor, my contribution in sculpting has been both through research work and clinical practice. While my clinical involvement has been in many of the areas stated above, my main areas of research contributions are reconstruction, craniofacial surgery, keloids and scars as well as burn care. I have also worked with others on medical education (Dairo et al, 2007, Aderounmu et al, 2011.).

Bites by humans often present with loss of body parts especially the head and neck appendages presenting for accurate apposition to prevent deformities. Our review of human bites of the face (Olaitan *et al*, 2008) shows that the lower lip was the most bitten, perhaps because of its prominence. The injuries mostly resulted from squabbles. Bites from love making was not recorded in our series unlike in some series from other countries.



Figure 13: Preoperative and postoperative pictures of Human bites of the face.

Various plastic procedures were performed. Early referral of these patients to experts with reconstructive skills is therefore advocated in cases of extensive injuries. Minimal debridement and reconstruction is possible immediately following the injuries. We suggest screening of both the biter and the bitten for HIV infection and possible prophylaxis to curtail HIV infection among patients with human bites.

A case of dog bite on an adult face, an unusual presentation in our environment (Ogbonnaya and Olaitan, 2005) was also reported with caution on the need for proper reconstruction.

Facial injuries and trauma are also treated successfully in our unit



Figure 14: facial injury (before surgery and two weeks after)



Figure 15: Reconstruction following gun shot to the face (before and after surgery)

Huge skin cancers are common presentation to the plastic surgeon in our environment with delay caused by the patient's visit to unorthodox places. We report a case of complete reconstruction of the upper lip following excision for squamous cell carcinoma using bilateral nasolabial flaps, submental flap and buccal mucosa with a good result and minimal donor site morbidity. We were the first to have this procedure reported (Oseni *et al*, 2014).



Figure 16: Reconstruction of complete upper lip following Advanced Squamous cell carcinoma of the upper lip.

Our study of the clinicopathological features of jaw tumours (Claitan *et al*, 2006) shows fibroosseous tumours as the most common (30.1%) followed by ameloblastoma (20.6%), cystic tumours (15.4%) among others.



Figure 17: Jaw tumour (ameloblastoma) preoperative and post operative appearance.

It should be observed that late presentation is the rule with attendant difficulty for the sculptor to do his work of carving and re-shaping. Rib grafts and the use of methyl-methacrylate have been tried by our unit. Extrusion rate was high with the methyl-methacrylate than the use of autologous rib grafts. The use of vascularised bone grafts remains the gold standard for the sculptor.

We reported a series of reconstruction of the defects created by excision of the parotid tumours with pedicled deltopectoral flaps with excellent results (Adedeji *et al*, 2014) as well as the use of adipofascial flaps in the treatment of open fractures of tibia and fibular (Onumaegbu *et al*, 2006) with minimum scarring.



Figure 18: Deltopectoral flap for repair of head and neck defects: before, during and after surgery

We also report cases of extensive gluteal necrosis following radiotherapy for prostate cancer and suggest a modification of the dosage as well as the method of delivering this therapy to patients with prostate cancer.

(a)



(b)



Figure 19: Gluteal necrosis (a and b): following radiotherapy for prostate carcinoma (Before and after surgery)



Figure 20: Gynaetresia preoperative and postoperative pictures

The Other areas of my work include gynaetresia which is an acquired occlusion of vaginal usually from insertion of herbal preparations (Adeniji *et al*, 2007). Various herbal preparations are inserted into the vagina for removal of fibroids, treatment of infertility and abortion. The end result is excessive scarring and occlusion of the delicate vaginal mucosa, making sexual activities and menstrual flow almost impossible. Various forms of treatment options were offered including thigh flaps, skin graft and mucosa re-arrangement. Education of our women on the need to seek and adhere to proper medical care is emphasized.

We worked on Autologous blood transfusion in Plastic surgery (Olaitan *et al*, 2006) where patients for elective surgical procedures like contractures, jaw tumours, pre-donate their own blood, four to six weeks before surgery and get transfused with it during surgery. This reduces the risk of HIV and indeed any transfusion related infection or reactions.

We (Oseni *et al*, 2015) also report a case of peno-scrotal avulsion from grinding machine in a child who accidentally got his cloth entangled by the rotating belt of the machine which then pulled his genitalia almost completely off. This was re-shaped successfully.



Figure 21: Penoscrotal avulsion from Grinding machine before (left), immediate after, (middle) and (much later (right).

We warn that parents must ensure that children do not operate delicate machines like in this case without adult supervision. Cosmetic surgery is in infancy in Nigeria. We (Adedeji *et al*, 2014), report poor awareness and disposition of health workers to cosmetic surgery. Poverty and ignorance seem to be responsible. Education of the populace

about what is achievable through plastic surgery needs to be increased for our people to take advantage of the optimal care that is already available.

Cleft lip and palates

Orofacial clefts are the most common malformations of the head and neck with a World-wide prevalence of 1/700 births. They are commonly divided into Cleft lip, cleft lip and palate or Cleft Palate; which can be complete or incomplete. Each of these groups can be on the right side or left and in some occasions, both sides (bilateral). Apart from the cosmetic challenge of cleft lip, a patient with an unrepaired cleft palate ends up with recurrent ear infection, upper respiratory tract infection and defective speech. Such a child is therefore limited from achieving his/her best. He/she cannot be a singer, a teacher, a lawyer or in any profession that involves the need to verbally communicate.

Until 2006, cleft lip and palate treatment in Nigeria was not popular due to the cost of the repair which an average Nigerian could not afford as well as fewer number of surgeons involved in the care. Many were ignorant of the possibility of treatment and several adults and old people with cleft lip and palate abound in the country. There are still a few scattered all over the country especially in the villages today. The first Pan African Association for Cleft lip and palate (PACCLP) meeting held in February 2006 where, as the facilitator of the meeting, I served as the African co-organiser.

First Pan African Association of cleft lip and palate conference



Figure 22: First Pan African Association of cleft lip and palate conference, Feb 2006 with Kabiyesi Olumoro of Moro, Oba Ezekiel Abidoye Oyeniya, Dr. Richard Kirschner, Dr. Linda D'Antonio and other foreign guests.

The meeting attracted over 200 cleft care givers to International Institute of Tropical Agriculture (IITA), Ibadan with participants from Nigeria, other African countries, Europe, United States and India. The meeting was co-sponsored by the Loma Linda University, USA, Seventh Day Adventist and the Smile train (USA). Pan African Association for Cleft Lip and Palate (PACCLIP) as well as Nigerian Association for Cleft lip and Palate (NACLIP) were born at the meeting.



Figure 23: surgery pictures of cleft lip repair in adults

Smile train has sponsored over twenty thousand cleft treatment among children and adults in Nigeria including LAUTECH teaching hospital and



Bilateral cleft lip



Figure 24a: Pre and post operative pictures of Cleft lip and palate repairs in children

Onward Specialist hospital both in Osogbo where we have operated over 500 of these patients free till date without any death or serious complications. All thanks to God and to our able team of Anaesthetists led by Drs. Babatunde Osinaike and J.O. Oyebamiji, Mr. Ezekiel Fadare, Mr Kehinde Ajiferuke as well as highly professional nurses who take care of these patients. My appreciation goes to Dr. D.A. Laosebikan and his family who volunteered the use of the Onward Specialist Hospital to take care of our numerous cleft patients. I thank Kabiyesi, Olumoro of Moro, Oba Ezekiel Abidoye Oyeniyi (an ENT surgeon) for starting the cleft care journey with us.



Figure 24b: Pre and post operative pictures of Cleft lip and palate repairs in children



Figure 25: Cleft lip and palate team at Onward Specialist Hospital.

Dr. O.G. Oseni and I have also been involved in cleft outreaches in other parts of Nigeria: Abeokuta, Asaba, Yola, Gusau (Zamfara state), giving them a smile, one at a time, free of any payment by the patients.



Figure 26: With the Cleft team at Abeokuta (left), Asaba (right)



Fig 27: Cleft team with patients and family at Kafancha (left) and Liberia (right)

I have also been sponsored to train surgeons in the treatment of cleft lip and palates in Liberia. Thanks to Smile Train who has also sponsored many Africans, including myself, to short term training in cleft surgery abroad. Many thanks to Mrs. Tomi Daniel, with whom the idea was conceived and Prof. Linda D'Antonio, formerly of Loma Linda University, USA, who facilitated our first PACCLP meeting and opened the door of this great opportunity which both surgeons and thousands of cleft patients still enjoy till date.

We (Butali *et al*, 2011) noticed that Craniofacial anomalies are surrounded with considerable superstitions stemming from cultural beliefs in many African countries. Typically, children born with craniofacial anomalies are

associated with ill omens, witchcrafts and are thought to be the consequences of an abuse by the gods on their mothers during pregnancy. Our assessment of the attitude of pregnant women in Osogbo (Olaitan *et al.*, 2011) to possibility of having cleft lip or, and palate child revealed 40% of the women would like to abort the pregnancies if antenatal ultrasonography revealed clefts. Altercation in the families and infanticide (mainly due to deliberate aspiration of the affected child during breast feeding or refusing to breast feed the child) are accompanying issues with clefts.

Our study (Onah *et al.*, 2008), prior to the arrival of Smile train sponsorship of cleft lip and palate treatment summarized findings in 102 patients. Ideally, we repair the cleft lip at about three month and palate about a year of life. The palate was not repaired in 20 of the patients after lip surgery; two patients with cleft lip and palate completely defaulted. This picture has changed since the free treatment intervention by Smile train and appropriate counseling. Virtually all the patients with cleft lip and palates present back for palate surgery today.

Adult patients with cleft lip and palate presenting for repair since the free cleft surgery by Smile Train have been observed to be poor, have low level of education, mostly artisans and often live in the villages. Cleft lip and palate therefore when unrepaired, leaves a scar on the quality of lives of such patients.

Day case surgery with no re-admission is now practiced by us for adult patients with only cleft lips as we operate them under local anaesthesia (Onah *et al.* 2006). Our conclusion is that local anaesthesia is safe, cost saving and it improves acceptance and compliance in adult patients with cleft lips.

Our study on the practice of clinical photography among cleft care givers in Africa (Olaitan and Oseni, 2011) reveals that 77.1% of the respondents personally took their patients' clinical pictures, supporting the fact that the plastic surgeon is sometimes also a photographer, taking the patients' pictures for record keeping, publications and education of patients.

In a nationwide study with collaboration from the University of Dundee, UK, we (Butali *et al.*, 2011) investigated the role of candidate genes and potential environmental influences in the etiology of orofacial clefts in the Nigerian population using a case-controlled study design. Our results showed a missense mutation A34G in MSX1 in nine cases and four hap map controls.

In another collaborative work with Ghana, Ethiopia and University of Iowa, USA, (Butali *et al.*, 2015), we showed that Orofacial cleft (cleft lip and palates) anomalies exhibit a multifactorial pattern of inheritance, with genetic and environmental factors both playing crucial roles. Population-specific associations were observed in the case-control analyses, with West African subpopulations (Ghana and Nigeria) showing a similar pattern of associations.

We (Esheteet *et al.*, 2017) also found six novel mutations: missense (c.359C>A; p.Pro120His and c.1091A>G; p.Asp364Gly), splice site (c.1144A>Cp.Ser382Arg), frameshift mutation (c.486delC; p.Gly112AlafsTer55) and nonsense mutation (c.1539C>A; p.Tyr513Ter) in orofacial clefts. None of these mutations were seen in 270 controls and in any known exome and whole genome databases including the 1000 genomes database that has data from Africa.

Our study provides evidence that, as in Caucasian populations, mutations in *GRHL3* may contribute to the risk of non-syndromic CPO in the African population. We also found that Novel *GREM1* Mutations Contribute to the Genetic Aetiology of Orofacial Clefts in Sub-Saharan Africans (Gowans, *et al.*, 2016, Gowans *et al.*, 2018). We believe that genetic studies are the future hope of preventing cleft through possible genetic engineering manipulations.

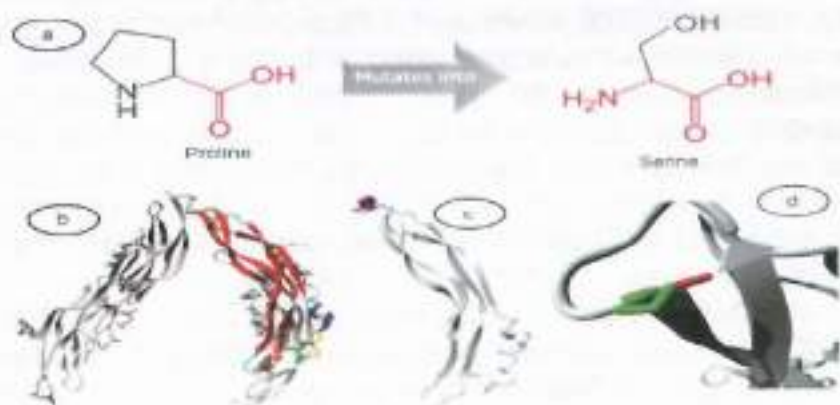


Fig. 28. Simulation of mutant p.Pro164Ser mutant GREM1 protein structure by HOPE. a: substitution of proline for serine which differ by size and hydrophobicity. b: Ribbon-presentation of wildtype GREM1 protein demonstrating various residues; blue – α -helix, red – β -helix, green – turn, yellow – 3/10 helix, cyan - random coil, grey – other complex molecules. c: HOPE simulation shows that the p.Pro164Ser mutation (magenta and small balls) occurs in one of the random coils that is crucial for multimer contact. d: a close-up view of the mutation showing the effects of the variations of side chains of wildtype and mutant amino acid residues on GREM1 protein; green – wildtype amino acid, red – mutant amino acid.

KELOID AND SCAR RESEARCH

Scarification is a common practice in Yoruba land. This is usually done for protection, prevention and treatment of ailments. However, while the efficacy of such practice is difficult to prove scientifically, the implications on delayed presentation for health care is enormous. Coupled with these is the fact that non-sterile instruments like blades and knives are used with high risk of infection with HIV and hepatitis (especially when these instruments are shared). We (Olaitan and Atiba, 2010) also observed that 35.6% of the people who had scarifications developed hypertrophic scars and keloids.



Figure 29: Scarification marks on a patient with abdominal swelling (left) with keloids (right)

Keloids are vexatious swellings on the skin or mucous membrane. They commonly follow injury, infection or healing of wounds in those who are predisposed to it. Keloids are most common among the black populace and since Nigeria is the largest concentration of black man, keloids are frequently seen in our community.



Figure 30: Keloid lesions can be single (left) or multiple (right)

No mention of keloids or its treatment has been made in either the Bible or the Quoran. This is probably because keloids are quite uncommon on the skin of the people living in the Middle-East as observed among the black. Keloid description has found itself in the folklore of the Yorubas. One of these is "ai tete kola, siso ni onso" (tribal marks not made in childhood leads to keloids). "Oju apa kole jo oju ara" (Scar sites never look like the normal skin) is another truth. According to Omo-Dare, Yorubas for long

have referred to keloids in their art and literature even ten centuries before Ailbert's reputed first report of 1806.

Mr. Vice Chancellor, nothing explains the understanding of the Yorubas about keloids better than the "osasee" which is an "odu ifa"-a verse of ifa oracle and one of the minor 240 chapters (Odu) of the Ifa Literary Corpus (Omo Dare, 1973). It is a combination of "Osa" on the right and "ose" on the left. This "odu ifa" in addition with "ejjogbe" describe the aetiogenesis, treatment and treatment outcome of keloids. The odu is shortened and translated as follows:

"The person for whom Osasee is cast is warned by Ifa
That all the children he would have
Should not have facial marks.
Historically, ifa divination was performed for Jenrola,
Offspring of a facial-mark artist
In the ancient city of Ijumu
While asking for children.
Ifa promised him children
But that he must leave his children
Without any facial marks because
They were going to be rich and important persons.
He however gave his first son facial marks
Because he was an offspring of facial mark artists,
The child's facial marks however began to swell
As the child grew.
He was surprised, because his own facial mark scars
Were not raised;
He became annoyed and killed the child.
He did the same thing
For subsequent children until the seventh.
He left the seventh one without facial marks.
The child grew and became wealthy.
Jenrola then appealed to Ifa priests
For more children,
For which he made sacrifices.
He requested from Ifa to allow him
To give the child facial marks
Since he was from a family of facial-mark artists

And that the child should survive.
He gave the child facial marks
Which became swollen again.
Frightened, he performed sacrifices repeatedly.
Then the Ifa Priests changed their position
And went into the forest,
Plucked the "herbs of Ifa"
For him with which the swollen facial marks
Were washed down.
The scars were still there,
But all the swelling turned into water,
And dripped down -(Omo Dare, 1973)

Mr. Vice chancellor, several points are made from this Ifa verse:-

- i. People without keloids may have offsprings with keloids
- ii. Keloids do occur in families.
- iii. keloids are difficult to cure and not curable with the help of sacrifices.
- iv. keloids can be treated with certain leaves and
- v. keloids scars still persist even after treatment.

While most of these points have been proved clinically and scientifically, the leaves that can cure keloids still remain a subject of research and we did some work to unravel these mysterious leaves

On keloid symptomatology, (Olaitan *et al*, 2012) we found the commonest symptom of keloids to be cosmetic concerns by all, followed by itching (28.9%), pain (26.4%), foul smell (3.3%), heaviness (5.0%), peppery sensation (6.6%), discharge (13.5%), tenderness (19.3%), and burning sensation 9 (9.3%). Anterior chest has the most symptomatic lesions. We assess the psychological effects of keloids on our patients (Olaitan, 2009) and observed that 56.0% of them had keloids in conspicuous locations. Most (96.8%) had the keloid lesions for more than one year, and 12.2% felt keloids negatively affect their works. More females (59.1%) felt stigmatized than the male counterparts. Only 35.8% of our patients felt keloids limit their social interaction; emphasizing the fact that most keloid patients in our environment are able to cope with keloid lesions.

Our collaborative NIH sponsored work on "keloid gene survey" with the University of Connecticut, CT, USA led to the recruitment of 4,000 subjects with keloids and controls.

We document our recruitment experience for a genetic linkage study in the Yoruba population in Nigeria (Olaitan *et al.*, 2013) and describe the challenges we faced in carrying out genetic study in Yoruba land. Some of the challenges were funding pilot study to demonstrate feasibility of study to funding agencies, unreliable transportation system and road infrastructure. In addition, participants are less motivated to participate in research without direct (health) benefits. And most participants reside in remote locations. Difficulty in understanding research project and purpose, inaccuracies in family and clinical histories as well as lack of birth records for older adults were observed. Hesitation to donate sample because of beliefs in "voodoo" and "juju". Paternity issues as many (about 18%) of the recruited subjects do not belong to their supposed fathers following genetic analysis.

Our study (Santos-Cortez, *et al.*, 2013) on the analysis of whole-genome data mapped a locus to chromosome 8p23.3-p21.3 with a statistically significant maximum multipoint LOD score of 4.48. This finding was followed up using exome sequencing and led to the identification of a c.1202T4C (p.(Leu401Pro)) variant in the N-acylsphingosine amidohydrolase (ASAH1) gene that co-segregates with the keloid phenotype in a large Yoruba family.

We investigated the common traditional ways of treating keloids (Oseni and Olaitan, 2011) in order to document various beliefs about the aetiologies of keloids, various agents used in Yoruba land to treat it and to investigate some of the agents.

What leaves or herbs were used by Ifa that led to the watery discharge of the keloids thereby flattening them? Our findings revealed that there were several beliefs about the causative factors of keloids as well as the treatment modalities. Treatment options include shea butter, snake oil ("ora ere"), *Calotropis* ("bomubomu") leaves extracts and palm oil. The one that gave most relief was said to be snake oil.

We wondered why fat from shea butter or snake are used for keloid treatment and then carried out a gas chromatographic analysis of fat from goat, cow, shea butter and snake oil. We observed a number of omega-3 fatty acids especially, eicosapentanoic acids in high volume in shea butter and snake oil (1.02% and 1.23% respectively) compared to fats from other sources. This omega-3 fatty acid may be responsible for the claimed relieve by our keloid patients when they use shea butter and snake oil in treating keloids.

Looking critically on two of the substances, shea butter and snake oil, we conducted an invitro research to assess the effects of these substances on the growth of fibroblasts (microscopic cells that produce keloids) and compared their effects to that of other substances like mineral oil, omega oil and refined, pure omega-3 fatty acids as well as Triamcinolone which is an agent commonly used to treat keloids.



Figure 31: Keloid gene study group with Prof E. Reichenberger at Iragbiji palace, 2012

If we could get substances that can reduce the growth of these cells, then we should be able to control keloid growth. We used different concentrations of these substances (Olaitan *et al*, 2011) and observed that shea butter, omega oil, snake oil and triamcinolone suppress the growth of fibroblast to a great effect in both keloid and normal skin fibroblasts.

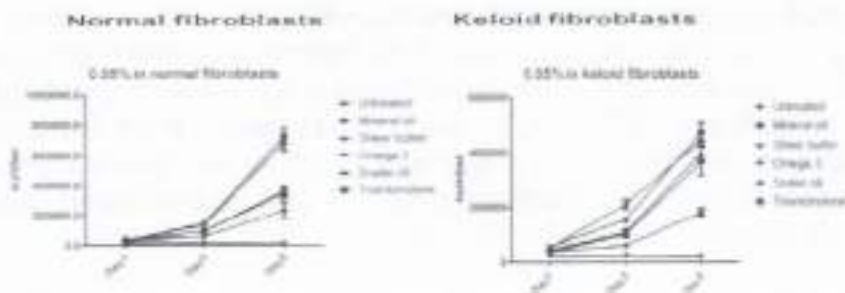


Figure 32: Fibroblast growth at different concentrations of snake oil, shea butter and Triamcinolone showing snake oil, shea butter and triamcinolone as actively inhibiting the growth of fibroblasts

Omega-3 fatty acids have the greatest effect in suppressing fibroblast growth. A further test with pure omega-3 fatty acids-alpha- linoleic acid and eicosapentanoic acid reveals increasing dosages of the substances decreasing the growth of fibroblasts much more than other agents.

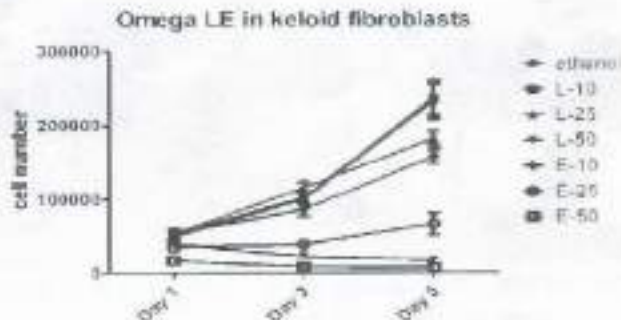


Figure 33: Effects of Pure Linoleic acid and eicosapentanoic acid (omega-3 fatty acids) on keloid fibroblasts at different concentrations. The higher the concentration the more the suppressive activity of the agents.

This suggests further that the active ingredients in snake oil, shea butter that must have assisted in keloid treatment are omega-3 fatty acid components.

We further carried out some experiments on rats by creating a full thickness wounds on their dorsal surfaces and allowed the wounds to heal by secondary intention. The animals were fed with shea butter, snake oil, triamcinolone and omega oil for about six weeks. Resulting scars were excised and processed for histology. Reduced fibroblasts were observed among the scars of rats treated with shea butter and omega 3 oil compared to the control.



Fig 34: Reduced number of fibroblasts observed in scars from rats with shea butter (middle) and omega oil (right) compared to the control (left)

Our conclusion is that the rich omega-3 fatty acids in shea butter and snake oil may be responsible for their use in treating keloids and observed reduction in symptoms in Yoruba land and many parts of Nigeria.

Calotropis procera Aiton ("bomunomu") is a wild-growing plant traditionally used for a variety of disease conditions such as leprosy, ulcers, tumor and healing of wounds. This leaf has been used by generations of keloid formers in Yoruba land. Is this one of the leaves ifa priests used to cure keloids?



Figure 35: *Calotropis procera* ("bomubomu")

In researching into the effects of calotropis on keloids, Aderounmu *et al*, (2013) studied the effects of the latex of calotropis procera on wounds created on rabbits and found out that there was a marked reduction in quantity and size of collagen fibres on day 21 post wound creation which was comparable with what was seen for the triamcinolone-treated group.

We evaluated the toxicological effect of calotropis procera latex (Oronisiet *et al*, 2017) following systemic use in Sprague-Dawley rats with a view to understanding its potential safety in treating wounds and preventing keloid formation in human. We found no significant effect on the differential count or the renal indices of the rats using uric acid, urea and creatinine levels suggesting its possible safety.

BURN EPIDEMIOLOGY AND CARE

Burn Injury is the most devastating assault to the body with high economic burden on the patients, the family and the community at large. It often leaves the patient with a lifelong morbidity that has to be adjusted and re-adjusted, shaped and re-shaped surgically. The work of the plastic surgeon usually starts with acute stage of burn injury and extends till almost the entire life time of the patient.

We studied the epidemiology of burns (Olaitan *et al*, 2007, Oseni *et al*, 2013) and found out that flame was the single most common (49%) cause of burn injuries in Enugu (Jiburum and Olaitan, 2005) and Osogbo, (66.7%) with majority seen in December and January probably as a result of dry as well as harmattan seasons around this time of the year.

Kerosene stoves and lantern explosions are the commonest causes of burn injury and these occur while pouring kerosene with the light on. Storing petrol in the house also causes escalation of flame burns during fuel scarcity. Pipeline vandalism and "fetching" of fuel has led to the death of several hundreds of people in our country.

Fetching Gasoline!



Figure 36: Fetching fuel from pipeline vandalism site-a very dangerous activity

Scald injuries are also observed with hot water, hot scup, tea etc. Most burn injuries occur at home and it therefore means that the home must be made safe to reduce these injuries.

Burn injuries in epileptic patients (Jiburum *et al*, 2005) usually follow falling into fire during epileptic fits while the patients cook, leading to extensive injuries. Most of the epileptic patients involved in burn injuries were not on any epileptic medications. The traditional but erroneous belief that the saliva of an epileptic can "infect" anyone who touches the saliva creates fear in close family members who could come to the aid of the epileptic victims during such attacks that lead to burn. Society must be educated that no one contracts epilepsy by touching epileptic's saliva.

We also reported Flame burn from masquerade (Olaitan *et al*, 2004), a rare injury observed among the Ibo men of the Eastern Nigeria. This occurs during ceremonial initiation into adulthood. Such men, in inflammable masquerade costume are made to dance round naked fire. Where the costumes they wear get ignited, they are not expected to pull off the costumes as this is seen as an act of cowardice. Several young men have sustained deep and extensive injuries from this leading to death. Only appropriate education can reduce this menace.



Figure 37: Masquerade costumes, difficult to remove in burn incidence

We report a case of oculo-facial burn in a child following hot fomentation with severe burn to the face including loss of vision in one eye (Olaitan and Ubah, 2006). We warn that although, hot fomentation is an age long procedure in treating cold in our environment, this practice should be avoided among children.

Unlike in the industrialized countries where chemical injuries are sustained from industrial accidents, chemical injuries are usually from assaults from a jilted lover or as a robbery weapon in our environment (Olaitan and Jiburum, 2008). The injury is usually on the face and are usually deep and extensive. Immediate irrigation of the affected areas with water will reduce the associated morbidity. Severe morbidity and mortality usually accompany chemical burns with occasional loss of the eyes and vital structures of the face needing series of shaping and re-shaping for the victim to achieve near normal appearance. Prevention is the most effective tool and legislation against anyone who inflicts such injuries will help in reducing the menace.



Figure 38: Chemical burn injury

Toxic epidermal necrolysis syndrome (TENS) is an unusual cause of skin loss that also presents like burns with complications as seen in extensive burns (Olaitan *et al.*, 2005). Precipitating drugs in our patients are Amoxicillin, sulphadoxine-pyrimethamine, tetracycline and arthesunate. Purchase of certain drugs should be controlled in our country to prevent untoward complications.

Burn wound dressing

One of the commonest problems of burn patients is the poor knowledge of first aid measures to be administered in our environment (Olaitan *et al.*, 2004). We observed that 51.0% of our burn patients had applied substances including raw egg, water, kerosene, palm oil, engine oil to burn surfaces. Anything available is applied to burn wounds. This is usually associated with wound infection, severe morbidity and death. The need to add ordinary water (not cold) to any burn is emphasized as this will not only stop an ongoing tissue destruction, it also brings comfort to the patients and reduces pain and subsequent infections. Ambulance facilities to transport patients following burn injury has also been problematic in our environment and patients are transported through any available means with attendant increased risk of wound infection.

Honey was used to treat infected wounds 2000 years before bacteria were discovered to be the cause of infection. An antifungal action has also been observed for some yeasts and species of *Aspergillus* and *Penicillium*, as well as all the common dermatophytes. Non-spore forming bacteria i.e. vegetative forms are not normally present in honey because they cannot

survive (Olaitan *et al*, 2007). Dressing agents for burn wounds are quite expensive and often not affordable by most of our patients. We compared the effect of honey on *Pseudomonas aeruginosa* to that of genticin (Adeleke and Olaitan, 2006) and observed zones of growth inhibition for every *Pseudomonas aeruginosa* isolate, varying from 5.5 to 41 mm and indicating 100% sensitivity of the clinical strains of *P. aeruginosa* to undiluted honey. We conclude that honey, a natural product, can effectively complement standard antibiotics, especially in cases of recalcitrant infections due to *P. aeruginosa* in wounds in general and in burn wounds in particular, with beneficial healing effects.

Amniotic membrane has been used on burned and ulcerated skin surfaces and observed lack of infection, marked decrease in pain, and increased rate of re-epithelialization of traumatized skin surface. We studied the acceptance of donation of the placenta among the pregnant women in Osogbo especially with our knowledge of the importance attached to this tissue (Olaitan *et al*, 2007).

Release of placenta for medical use is resisted by most of the women for fear that it could cause harm to their babies. Seventy six (27.2%) of the respondents even felt the placenta was useful to the baby after delivery. Fear of using the placenta for money rituals, 40(14.3%) and endangering baby's life, 24(8.6%) were also reasons given for reluctance to release placenta for medical use. We conclude that these are socio-cultural impediments that need to be overcome by appropriate education for such an important tissue to be useful in our environment.

Human Immunodeficiency syndrome (HIV) has been a very scary infection especially in the management of burn patients with extensive wounds that need to be dressed daily by the nurses. A study on the attitude of the nurses in the burn unit (Olaitan *et al*, 2005) to HIV/AIDS patients revealed 93.3% of the nurses believed they could be infected with HIV virus while managing HIV/AIDS patients. The fear of discrimination against such patients is therefore real.

We opine that a need exists to continue to educate health care workers on the challenge that HIV/AIDS presents to our caring ability, especially in patients with extensive wounds and increased chance of infecting care

givers while we make all efforts to protect ourselves through the universal preventive methods.

Burn Complications

Review of burn injured patients in our unit revealed acute kidney injury among 12.2% of our burn patients (Okunola et al, 2010). This compared favourably with the world-wide incidence of acute kidney injury in burns patients which varies between 0.5% and 30% with mortality (death) as high as 90% -100%. Mortality in this subset of our patient was 50%. We believe that these injuries are due to a combination of factors including late referrals and management inadequacies most often at the point of first care. We suggest that Primary care physicians should be educated on the initial resuscitation of burn patients and to refer the patients as early as possible where indicated.

Axillary (shoulder joint) contractures commonly result from deep burn to the trunk especially when adequate rehabilitation is not given. It is often seen in our environment following poorly treated burn injuries following conservative management of burn wounds around the shoulder joint. This often interferes with the ability to feed and perform other important upper extremity functions. Contracture release should therefore encompass the entire axis of rotation of the shoulder to facilitate complete range of motion (Olaitan et al, 2007).

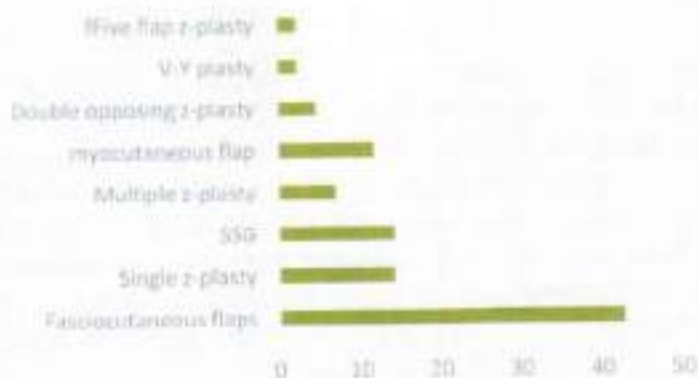


Figure 39: Surgical options for axillary contractures.



Figure 40: Axillary contractures before and after surgery

While early eschar excision, wound grafting, and rehabilitation of the joint would help in preventing this morbidity, the choice of flaps rather than skin grafts when reconstruction is needed, is recommended to prevent recurrence.

Marjolin's ulcers, a cancerous transformation of an unstable scar, complicates burn scars and chronic wounds. Chronic irritation over two or more decades encourages this. We (Olaitan and Ogbonnaya, 2007) report a case of early transformation of a scar from a self-inflicted flame burns by a young school leaver who had set herself ablaze two years earlier. This was an unusual presentation and ran quite a fast course. The sculptor could unfortunately not rescue this lady from death. Early excision and grafting of burn wounds prevent unstable scars and possibility of malignant transformation could be reduced.

We also show that Marjolin's ulcers develop from various sources (Onah *et al.*, 2006) which include poorly managed burn injury, traumatic ulcers, osteomyelitis, cancrum oris and chronic venous ulcers. Most of the patients have delayed the treatment as a result of initial improper treatment.

Deaths sometimes occur following burns, and we report mortality of 20% (Olaitan *et al.*, 2006) among our patients. This is higher than the mortality in developed countries of about 2.1%. Extensive burn injuries, delay presentation, poor ambulance services, poor referral, poor facilities for care, high cost of care all contribute to this mortality. Incessant industrial actions in our hospitals are additional problems that may increase morbidity and mortality.

Mortality is higher in patients with flame burns and in the elderly. Survival also decreases with increase percentage burn surface area. There was no survival among patients with 80% burn surface area or more among our patients and causes of death were acute renal failure (42.1%), septicaemia (31.6%), acute respiratory distress syndrome (8.7%), shock (7.0%) and peptic ulceration (1.8%). (fig 39).

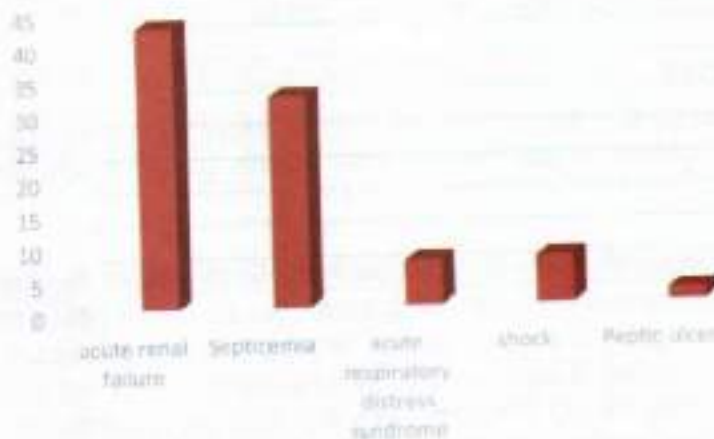


Figure 41: Causes of deaths in burn patients

Death among children who had burns was found to be 11.0% compared to what we observed among the adults (Olaitan *et al*, 2007). While the commonest cause of burn injuries in children remain hot liquids-water, tea, soup, flame burn injury was responsible for most of the deaths observed among children. Every effort must be taken in preventing children from cooking without supervision. This will reduce the incidence of flame burns among the children and reduce morbidity and mortality.

Burn prevention

We suggest the use of three types of modified burglar proofs (Olaitan and Dairo, 2007) in the construction of our houses. These include one with a window within it", the collapsible type and a totally removable burglar proof hung to the wall with hooks. These will reduce the morbidity and mortality commonly associated with domestic bum where people get trapped by burglar proofs.

Mr. Vice chancellor, our conclusion on burn injuries is that Nigeria deserves more burn centres than the few poorly equipped ones that we currently have. We suggest a well equipped burn centre in each of the six geographical regions of Nigeria with each teaching hospital and federal medical centre also having a small unit to cater for burn patients rather than managing burn patients in general wards as commonly done in many centres in Nigeria today (Olaitan and Olaitan, 2005).

FUTURE WORK

The future, surely is in the hand of God. With the help of God, we should be able to continue on our research work towards getting a cure for keloids.

Nigerian and especially many of our people in the South western part are ignorant of causes of sicknesses and diseases. We attribute ill health to many things, including witchcraft. We look for 'who' is responsible (which we can never prove) instead of 'what' is responsible (which we can scientifically prove) for our ill health. Many therefore attend unorthodox places (which are mere deceipts) to get care. I plan to use the knowledge I have in ensuring that our people are educated about causes and prevention of ill health.

RECOMMENDATIONS

1. Our university, as a university of technology should through a collaborative work between college of health sciences and other faculties, be at the forefront of researching into our herbs to assess their efficacies. We need to create a unit for this purpose.
2. Public and private media houses are urged to create opportunities for medical professionals to educate our people on health care. This should be a priority that should serve as part of their corporate social responsibility. An end should come to people going to the media to lay claims to cure to sicknesses they hardly know anything about. This will prevent late presentation and assist the sculptor in effectively carving, shaping and reshaping the form of man.
3. We often hire the best experts to take care of our properties like cars, houses, equipment etc - our health does not deserve less.
4. Poor facilities and incessant industrial actions in our health facilities limit what the surgical sculptor can sculpt. I suggest that laws should be enacted that will ensure that political and administrative office holders spend their money and not public fund for medical tourism. This will assist all of us to pay better attention to where we are to be treated.
5. Scholarship as well as low interest loans should be made available to undergraduate students as this will assist several future sculptors.

ACKNOWLEDGEMENT AND APPRECIATION

Mr. Vice chancellor, I am a product of the benevolence of many people, too numerous to list here today. Almost all the people I have met in life have positive impacts on me; a very few, I mean very few, have negative impacts while a rather small fragment left me unchanged. I remain grateful to them all, as all they did or didn't do have contributed to the man you are seeing today.

I appreciate the Vice chancellor, Prof. A.S. Gbadegesin, during whose tenure my promotion to the Chair of Burns and Plastic surgery was announced about six years ago. Many thanks to all my teachers from Primary school to the University. I thank my teachers, Dr. Iheuko Sunday Ogbonnaya, Prof. B.C. Jiburum, Dr. R. E. E. Nnabuko and Dr. E. C. Echezona for teaching me Plastic surgery in the most friendly manner.

I appreciate all my students and resident doctors who continue to challenge me to learn more and teach more. I also thank my numerous patients, dead or alive, who are the source of my research activities.

I appreciate the Smile train (USA) for sponsoring me to training, conferences and above all for continuing to pay for the numerous cleft children we operate.

I thank all the Nurses I have worked with in the theatre, clinics, wards especially the Burn units. They have all been an important part of my success story of today. I appreciate all my colleagues in the Department of Surgery and the college of Health Sciences in general. I am grateful to Ladoke Akintola University of Technology and LAUTECH Teaching Hospital, Osogbo as well as National Orthopaedic Hospital Enugu for serving as fertile grounds for my clinical, research and academic activities.

The Keloid group worked tirelessly with me and I thank each of them. They are Prof. S. O. Fadiora (Co-investigator), Mrs. Eunice Atiba, Mrs. Kehinde Adefila, Mrs. Patricia Adebayo (Research facilitators), Mr. Michael Olaleye and Precious Ilesanmi (Research assistants). I acknowledge my research Collaborators in the United States of America Prof. Ernst Reichenberger, Dr. Azees Butali and Dr. I-Pen Cheng.

I almost missed attending High school because my parents could not afford a sum of One Hundred and Ten naira (N110.00) needed as my school fees until Chief Bola Ige at his inauguration on the first of October 1979 said "from this moment, education is free from the primary to the tertiary institution in Oyo state". That singular act prevented me from ending up an illiterate sculptor! Thank you, "uncle Bola Ige", rest on, in the bosom of the Lord.

I thank all my siblings, Madam Oseni, Mr. and Mrs. Salawu, Pastor and Mrs. Akin Olaitan and Mr. and Mrs. Biodun Olaitan for their contributions. My nieces, Deola Davies and Bolaji Oyediji made significant contributions to what you are seeing today. I thank my "father", TPL Remi Makinde who provided an alternative source of fund to me whenever I needed one throughout my University days. My appreciation goes to Emeritus Prof. Ademola Oyejide who continues to be our great example in academics. I thank my cousin, Dr. Idowu Oyeniran who handed over to me all the

books needed as I followed him from a distance in medical school. Hon. Matthew Alabi is my 'twin brother' who taught me boldness and honesty. My appreciation to you and your wife.

Mr. and Dr. (Mrs). Samson Adeniran, Mr. and Mrs. Adegbola Adeniran are two families so close. Thank you for believing in me and standing by me during high school days. I appreciate Pastor and Pastor Mrs. Ogunleye and family who have adopted me as a member of their family and serve as spiritual mentors to me. Pastor Isaac Oiasunmibo and Mrs. Olufunke Adeagbo are my rare brother and sister. Thank you for always making your home ready for me anytime I visit the United States. I thank my father and mother in law, Pa and Madam Abraham Alao for entrusting me with their daughter. I also appreciate all the other siblings of my wife with their spouses especially Mrs. Modupe Esther Suaibu, who assisted a lot while we were making academic progress and raising our children. Thank you so much, Dupe.

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Honourable Commissioner for finance, Osun State, Alhaji and Dr. (Mrs.) Bola Oyebamiji.

I thank all my research collaborators who are too numerous to list here. I thank Dr. and Mrs. Amos Adeleye as well as Dr. Kunle Ojemakinde for their friendship. Dr. Amos Adeleye linked me up with Mrs. Tomi Daniel, and this marked the beginning of Smile Train entry into Nigeria and West Africa. I appreciate Kabiyesi, Oba Ezekiel Abidoye Oyeniyi, Olumoro of Moro, an Orthorhinolaryngologist who started the Smile train journey with us. I thank Pastor and Pastor Mrs. Ayodele for always believing in me and Pastor and Pastor (Mrs.) Olaosun for their constant love.

I thank all pastors, ministers and especially members of the Redeemed Christian Church of God (most especially Osun Province 6), the LAUTECH Christian fellowship and the Christian Medical and Dental Association who are present here today. I appreciate you all.

I thank Kabiyesi Ataoja of Osogbo HRM Jimoh Oyetunji Olanipekun Larooye II who has been a father and a great friend to me. Thank you so very much Kabiyesi. I appreciate Kabiyesi, Akirun of Ikirun HRM, Rauf Olawale Adedeji.

I thank my father, the Akire of Ikire land, HRM Oba Olatunde Falabi Lambeloye III for his trust and for his presence here today. Ki ade pe lori o. My appreciation goes to the entire members of Ikire Progressive Union (home and abroad) and indeed the entire citizens of Ikire for the trust you have in me, making me the 6th National President of Ikire Progressive Union (IPU) and for the cooperation I have received from you all.

Dr. and Dr. (Mrs.) AbdGaniyu Oseni have been brother and sister to me. I thank Dr. Oseni for all that we have shared together. He is a loyal and faithful friend. I thank you and your family.

I am eternally grateful to my parents Pa. and Madam Olaitan Akinperu, especially my mum, who struggled to do any legitimate work that could earn her something to educate us. She passed on to glory about four months ago at the age of 101 years.



Figure 42: My Sweet Mother

My children have been a real source of joy to me. I thank them all for bearing with me and for their contributions to what we are witnessing today. They are Oluwatomisona, Temitope, Oluwademilade, Oluwadamilola and Fiyinfoluwa.

Mr. Vice chancellor, of all the people I have met in these few years of my existence, one has made the greatest indelible marks on my life. I met a young innocent girl in 1986 while I was preparing for Joint Admission Matriculation Board (JAMB). We became friends and got married ten years later. She has become inseparable from any success I might claim today. She is my friend, my adviser, my counsellor, my partner in progress and a great pillar without whose unflinching support and love, today would have been impossible. She is my wife and lover, Janet Olubukola Olaitan, a professor of Public Health and Environmental Microbiology and currently the Deputy Vice Chancellor (Administration and Development), Osun State University, Osogbo. Blessed be the day I met you.

Mr. Vice chancellor sir, according to the great book, "the race is not for the swift, nor the battle for the strong, but time and chance happen to them all". It says further that "he makes all things beautiful in his time", and that "it is not by power nor by might but by my spirit, says the lord". The greatest physician, the most astute sculptor picked me up from nothing,

cleansed, moulded, shaped, re-shaped and sculptured me to what you are seeing today. He still continues to mould me in an amazing way. He is the author of my life, to whom I owe my existence, the lord Jesus Christ.

Mr. Vice chancellor, I am a "work in progress" in His hand, the greatest sculptor is yet to finish with carving, shaping and re-shaping me. I appreciate your coming to listen to this inaugural lecture. God bless.