

**THE HAND MIRRORS
THE MAN**

BY

H. O. ADEYEMI-DORO



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THE HAND MIRRORS THE MAN

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University of Lagos, 2003

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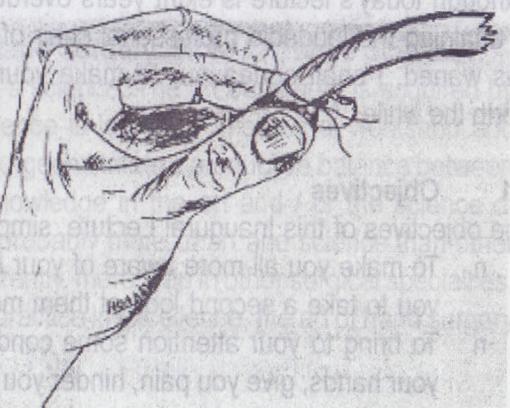
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THE HAND MIRRORS THE MAN



REHABILITATION



U. I. U. ARCHIVE

your hands, give you pain, hinder you from making wealth with
 to find to your attention a condition that may damage
 you to take a second look at them more often.
 To make you all more aware of your hands and to encourage
 surgery, hand surgery, hand surgery, hand surgery, hand surgery,
 branches of surgery.
 The objectives of this inaugural lecture simply are:
 1.1. Objectives
 Although today's lecture is eight years overdue while the enthusiasm
 first to be delivered by a Hand Surgeon.
 The inaugural lecture of today titled, "The
 and by developing acute surgical hand surgery.
 Department of Surgery on the 22 July, 1988.

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THE HAND MIRRORS THE MAN

1.0 INTRODUCTION

It is with gratitude, that I accept the opportunity from the Vice Chancellor of the University of Lagos, Professor Oye Ibidapo-Obe to deliver an Inaugural Lecture this 17th day of December, 2003. It is a great privilege and honour for me to deliver the 147th Inaugural Lecture of this great University, entitled: “**The Hand Mirrors the Man**”. This lecture is also the 31st Inaugural Lecture from the College of Medicine and the 11th from the Department of Surgery, University of Lagos.

The first Inaugural Lecture from the Department of Surgery and the 2nd of the University of Lagos was delivered by H. Orishejolomi Thomas on the 17th of January 1968. As we all know, the 1st Inaugural Lecture of the University was delivered on October 3rd, 1962 by Felix Dosekun of the Department of Physiology, also from the College of Medicine. Professor Phillip Okeowo gave the 11th and last lecture from the Department of Surgery on the 22nd July, 1998.

The Inaugural Lecture of today titled, 'The Hand Mirrors the Man' is the first to be delivered by a Hand Surgeon in the University of Lagos. Although today's lecture is eight years overdue while the enthusiasm of attaining the laudable professorial chair of the University of Lagos has waned, I shall endeavour to make your presence here tonight worth the while.

1.1 Objectives

The objectives of this Inaugural Lecture, simply, are:

- n To make you all more aware of your hands and to encourage you to take a second look at them more often.
- n To bring to your attention some conditions that may damage your hands, give you pain, hinder you from making wealth with

them and which may predispose to premature death; so that you can avoid them.

To settle the obligatory duty of an Inaugural Lecture to the University of Lagos, the Lagos community and to the citizens of Nigeria.

To acknowledge and pay tribute to people whom God used to influence my life journey thus far.

1.2 Hand Surgery: a super specialty

Hand surgery involves surgery of the hand and upper limb, including the shoulder. The practice of Hand Surgery is little known and understood in Nigeria, the West African States and in many oversea communities. It is regarded as a super specialty in the field of surgery because doctors eligible to receive a Fellowship training in Hand Surgery have to be certificated general surgeons, plastic reconstructive and aesthetic surgeons or orthopaedic and trauma surgeons. Of these three groups, the plastic, reconstructive and aesthetic surgeon is probably best prepared to become a Hand Surgeon. Hence, the Hand Surgeon is not everyone that operates on the hand.

Eighty-five percent of my surgical practice since employment by the College of Medicine, University of Lagos in November 1979, has been in the field of Hand Surgery.

1.3 Hand Surgery: Hand Surgery: More Art, More Science

Surgery is both an art and a science. The art of surgery is acquired by apprenticeship and its science is learnt by intellectual workshop and research. The academic surgeon strikes a productive balance between the two, contributing to knowledge in the art and / or the science of surgery. Hand surgery is probably more of art and science than other branches of surgery. Apparently, more than in other surgical specialties, it would be very difficult to practice in excellence, the art of hand surgery devoid of the science.

After I had listened to the inaugural lecture of Prof. K.A. Adegoke on August 20, 2003, when he said that curriculum theorising is both an art and science¹, it dawned on me that there is hardly any academic discipline that is not, or that cannot conform to art and science.

The artist is rarely rigid in the strokes of brush or hues of paints, as he creates and puts a physical or mental view on canvas. So also, the hand surgeon may not be able to prejudge methods of repair until he is in the field of mutilated tissues. This is especially so if his practice is in a developing nation such as Nigeria, because of the complexities of hand problems and lesions encountered. These complexities are caused by late presentation of patients, severe congenital malformations and iatrogenic complications created by surgeons with poor knowledge of hand surgery.

Therefore, the hand surgeon cannot afford to have his mind rigid and bound down. He has to creatively repair tissues to improve the function, cosmesis and general well-being of the patient. He must have numerous alternative techniques in his armamentarium and may have to design unwritten methods to succeed.

1.4 The Hand Rehabilitation Team

The team approach yields the best result in the management of hand problems. The results achieved by the hand surgeon are greatly influenced by the effectiveness of the hand rehabilitation team. The hand surgeon is probably as good as his hand rehabilitation team, for the outcome of his work depends much on the team. The team, employed in my practice, in the Lagos University Teaching Hospital, consisted of the following.

- The Hand Surgeon
- Surgery Theatre Nurse
- Surgery Ward Nurse
- Surgery Outpatient Nurse

Hand Therapist;

- Occupational Therapist
- Physiotherapist or
- Prosthetist/Orthotist

Neurologist

Medical social worker

A *hand therapist* is a certified occupational therapist, physiotherapist prosthetist or orthotist who has spent a year of fellowship in the rehabilitation of patients with hand problems. The hand therapist is as rare as the hand surgeon in Nigeria. Occupational therapists and physiotherapists with special interest in the rehabilitation of hand surgery cases were employed in the management of our patients.

2.0 THE HAND MIRRORS THE MAN

The title of this inaugural lecture, "The hand mirrors the man", was taken from an article written as a junior surgery resident at the Homer G. Phillip Hospital, St. Louis, Missouri, USA in 1975².

The hand is an organ we take for granted. Most people pay no attention to the hand until when injured as in slamming a door on a finger is infected by whitlow, e.g. paronychia and felon. In both situations, there is much pain and the patient is forced to notice the hand.

The hand is second only to the face in reflecting the personality and character of man. When we dress normally, it is only the hands and face that are left exposed. The highly sophisticated hand in its remarkable mobility and flexibility mirrors the personality of man in his handshake, his penmanship, paintings and by any products of his hand. Sentimental values attached to the hand are exemplified in phrases such as 'the hand of fate', 'the long hand of the law', and the swift hand of justice. Ceremoniously given in holy matrimony is the hand of the bride; and 'I prefer to die by the hand of God', said the noble Ambroise Pare.

2.0 Manus

Trek not

Bear no more

Hook no more

Grasping, feeding

Leading, learning

Oiling and planting

Uprooting.

2.1 The hand: a messenger

The hand is the messenger of the body. It undertakes responsibilities other members would not dare to undertake. It hits the foe, yet, sneaks affectionately on the spouse announcing the coming of the lips and other parts. When man is hungry, the hand feeds him and when he is in darkness, it is the hand that gropes for light and direction.

The hand dusts the seat and verifies the sharpness and heat intensity of objects, sometimes to its chagrin! Therefore, it should not be surprising that it is the most commonly injured organ in the body. Relieved of its burden since the homo sapiens got up on his feet, the hand had undergone phenomenal adaptation for performing unlimited functions like the numerous tentacles of the octopus.

By the hand is the inner man revealed. Fair and gentle is the hand of a real lady transmitting affection, but rugged and leathery is that of a manual labourer beset with calluses. Huge and strong is the hand of the weight-lifter, but swift and dexterous is that of a surgeon and of the pickpocket. The objective of the hand surgeon is to make the hand happy within the whole.

2.2 The hand: a diagnostic store

The physician, probably next to the palmist, appreciates most, the unlimited diagnostic values of the hand; and anyone who omits the

inspection, palpation and auscultation of the hand cannot but miss significant clues. The pale hand frequently signifies anaemia, and cyanosis is revealed in the blue hand. The classical saltcellar koilonychias may be receding into extinction, finger clubbing of pulmonary osteoarthropathy is still around. Enlarging joint prominences of the fingers may indicate rheumatoid arthritis or the dactylitis of sickle-cell disease.

U. L. ARCHIVE

The hand frequently falls prey to vascular disorders with variegated manifestations ranging from the slow capillary filling of vascular insufficiency to the pain, pallor and paraesthesia of impending gangrene. The lady, aged forty years, with cyanosis and paraesthesia of the fingers in winter, is probably a victim of Raynauds disease; while the man aged thirty years with the same features involving fingers and toes suffers from Burger's disease.

Manifestations of systemic conditions in the hand are sometimes bilateral. Examples are the tender micro-emboli of sub-acute bacterial endocarditis, and the paw-like grotesque hand of acromegaly. Also, bilateral are the finger tremors of emotional disturbance and hyperthyroidism, or the pill-rolling coarse tremors of paralysis agitans, parkinsonism and senility. The hand may flap in liver failure or may tremble with intent in disseminated sclerosis. Arousing ready sympathy, is the involuntary snake-charming motion of chorea and athetosis. Hence, it is a shrewd motto in Hand Surgery not to treat the hand in isolation from the rest of the body.

The fibrous palmar attachments frequently correspond to the flexural lines, and abnormal creases of the Simian and Sydney lines type may be indicators of genetic predisposition to leukaemia, or diagnostic leads of chromosomal disorders as in Down's syndrome. However, all abnormally creased palms do not signify disease; for increased palmar creases may be found in healthy orientals.

2.3 Hand function

No two hands nor digits nor their markings are identical. Hence, finger printing has developed into an indispensable diagnostic tool in criminology. So unique are finger-prints that keys and locks specific to the owner's digital markings are manufactured for greater safety and protection. As the valet becomes the master, so the hand becomes the man.

The hand is the safest physical contact with the external environment. Although it is not indispensable to life, living without the hand would be far from being comfortable. Yet it is the commonest victim of accidents and trauma compared with the rest of the body. Whatever tissue is injured, the objective measurement of the extent of hand injury be it organic or traumatic, local or systemic is the degree of functional limitations of its joint motion, and the degree of sensibility impaired. The scarifications of burns and Dupuytren's contractures are examples, often resulting in deformed hands. Hypertrophic scars may develop in healing wounds in the back of the hand and other parts, but keloids³ are almost never seen in the palm and sole of the foot.

2.4 The thumb

The hand is apparently next to the brain in depicting the height of man's evolution. The thumb enjoys a relatively greater representation in the brain than any other part of the body. The development of a thumb, the master finger, is an evolution that elevated man high in the animal kingdom. The acquisition of opposition by the thumb enables grasp, hold and pinch. These actions selectively denote man's pre-eminence in the mammalian kingdom.

Thus, the thumb plays a key role in the overall function of the hand and alone sub-serves 40-80% of hand function, (fig.1)

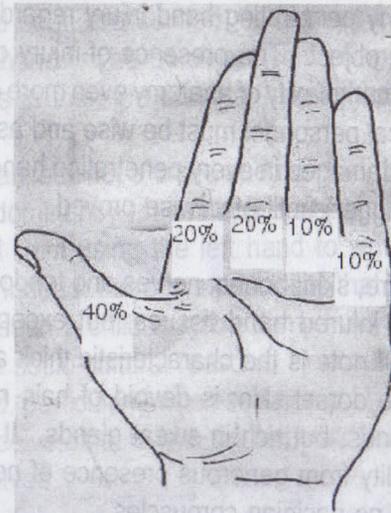


Fig. 1: The thumb subserves over 40% of hand function

When the thumb is incapacitated, the ability to grasp, hold and pinch is lost and the hand is left with the poor action of finger hooking like a monkey. Injury to the muscular innervations of the master finger alone may cause eighty percent of hand dysfunction. It then follows that the thumb would enjoy greater attention from the hand surgeon during repair and reconstruction than other fingers.

2.5 Anatomy of the hand

The anatomy of the hand, albeit complex, is exceedingly interesting, at most, to the Hand Surgeon. It is appropriately considered to include the anatomy of the arm and forearm whose musculo-tendinous strings make the hand and its digits dance like a puppet. Thus, a severed tendon leaves the finger as useless as a marionette without strings, and a severed nerve leaves it drowsy and painful.

The structures of the hand are vessels, skin and subcutaneous tissue, bones and joints, nerves, tendons and muscles. A large number of these structures are conglomerated in the relatively small hand and

are vulnerable to any penetrating hand injury regardless of the small size of the violating object. The presence of injury or any disease in the hand makes the complexity of anatomy even more complex. Hence, the attending medical personnel must be wise and assume that a vital structure has been damaged in every penetrating hand injury (gunshot, stab knife, small dagger) until otherwise proved.

As a rule, vasculature, skin, bones, nerves and tendons is the order of priority of repair of injured hand tissues; but exceptions to the rule occur frequently. Of note is the characteristic thick and tough skin of the palm, unlike the dorsal skin, is devoid of hair, melanin pigments and sebaceous glands; but rich in sweat glands. It is endowed with exceptional sensibility from generous presence of nerve endings and tactile organs such as pacinian corpuscles.

The palm is tacked down by fibrous elements into compartments, of clinical-surgical significance. Fortunately, the relatively thin dorsal skin of the hand overlies a loose connective tissue providing ready accommodation for inflammatory fluids from all sites including the palm. The unwary surgeon had incised an abscess supposedly in the dorsum of the hand when the problem, in fact, was located in the palm.

The unique prehensile qualities of the palm are enhanced by the presence of imbricate epidermal ridges enabling man to perform diverse actions varying from the finest button darning to the grossest Olympic feat such as javelin throwing or hauling the hammer.

2.6 Left hand dominance

An estimated 75 – 95% of people are right handed. This means that they use the right hand in performing most tasks including writing; and that the dominant controlling brain centre is located in the left cerebral hemisphere. In a survey of hand dominance amongst 1,328 children of Lagos State community secondary schools, we found that 2.3%

were left hand dominant and 5.4% were potentially left hand dominant children who had been pressurised, sometimes bordering on torture, to use the right hand.⁴ The dominant controlling brain centre of left handed people is in the right cerebral hemisphere.

Left hand dominance is not a crime and no child, in fact no one, has a choice of hand dominance. It is inappropriate, and not necessary, to dissuade a child from using the left hand to write, do her work and perform sports. Indeed, there is a possibility that the height of natural performance of such a child may be dampened when so dissuaded. However, due to socio-cultural reasons, I encourage them not to eat with the left hand, particularly when in a group. I also encourage them not to give or receive objects with the left hand, especially when older people are involved.

Two of my children, boys, are left hand dominant. I also have a sister and a sister-in-law who are actively left handed. The male to female ratio in our study was 2: 1.

3.0 LAYING OF HANDS AND TELEMEDICINE

Technology and electronics have made major strides in improving accuracy of investigation of human ailments, especially with the arrival of machines, such as computer tomographic scans, magnetic resonance imaging (MRI) and investigative and therapeutic fiber-optic endoscopes. Telemedicine at the extreme, may be defined as “long distance medical practice” or “practising medicine in absentia”. It is a development in medical practice made possible by improvement in technology and electronics.

However, sophistication in technology and electronics is not a close substitute for the art of having a discussion with and the laying of hands on patients (history and examination). Oft-times, what the patient requires to get well is a heart felt discussion with and the laying of hand by the doctor. Telemedicine that de-emphasizes direct contact with patients

should not be encouraged. Telemedicine should be employed in addition to 'laying of hands' to achieve improvement in patient's care. A scenario whereby the doctor takes care of his patients primarily via e-mail and electronic facility is suspect and may be dangerous.

The risk of violating patients' privacy and eroding confidentiality would be increased. The human would be further reduced to a commercial commodity, such as a bag of rice or cement.⁵ Moreover, doctors would run the risk of being like the Nigerian driving licence officer who in absentia sent a driving licence to a woman with no legs and no hands.

3.1 The Hand of God

Prior to the year 1991, I lived a life akin to that of a man named in the Holy Scriptures as Cornelius of Caesarea, a centurion of what was called the Italian Regiment (Acts of Apostles, Chapter 10). I had been a religious God fearing Church going Christian who focused on a life of honesty, fair play, abhorring injustice: a life of general kindness and some alms giving; yet, a life which had a major share of earthly tribulations and trials.

Then some messengers of God came with the Good News of the Gospel of Christ. They said Salvation is not by works, but by faith in his Son Jesus Christ, incarnate of the Virgin Mary. He was crucified, He dead and was buried but He rose again on the third day.

From that time, God laid his right hand permanently on me in His love and mercy, as I gave my life to Jesus Christ in 1991 and became a member of the family of God. My name was written in the book of the Lamb. Peace and joy of God came into my heart and has remained my portion. I had been bold, yet afraid in the world; but now, I am bold with humility in Jesus Christ who strengthens me.

It is the same Gospel message of Jesus Christ that I bring to all who listen to me today. I recommend that you accept Him into your life as Lord and Master for the Salvation of your soul. Try Him by faith and be blessed with peace that mortals cannot comprehend. I pray this peace and fullness of joy into you today and for the rest of your lives in the name of Jesus. Amen.

3.2 The Wedding Gloves of Halsted

In 1973, soon after arrival in the USA as a junior surgery resident, I wrote an article titled "The wedding gloves of Halsted". The well-researched article told the fascinating story of the introduction of operating rubber gloves into surgery.⁶ As recently as the latter part of the nineteenth century, surgeons, their assistants and scrub nurses performed surgical procedures on patients with bare hands and fingers, not wearing any gloves.

At Johns Hopkins Hospital in 1889, rubber gloves were first used to protect the hands of theatre scrub nurses who gave instruments soaked in carbolic acid (an antiseptic) to surgeons. The story ended romantically with Halsted, a surgeon noted for his meticulous surgical dissections and the gentle handling of tissues, got married to his favorite scrub nurse.

The published article earned me a cheque for one hundred dollars with which I purchased a second-hand typewriter on which I learnt to type. However, the real significance of this typewriter is that most of the work that led to my professorial chair in the University of Lagos, the inaugural of which I am delivering today, was typed on it. It is rugged; it has fine characters, and probably, may pass for a moderately bulky laptop! Unfortunately, it is still one of the more reliable active typewriters in the Department of Surgery, College of Medicine, University of Lagos, where there is only one official computer for 24 lecturers.

4.0 PECULIARITIES OF HAND PROBLEMS IN NIGERIA

Acute and chronic hand injuries constitute 65% whilst acute and chronic infections form 24% of all hand cases surgically treated in the Lagos University Teaching Hospital (LUTH). Eleven percent were non-traumatic and non-infective (a-bacteria) hand conditions. The latter include non-specific inflammatory lesions, congenital malformations, tumours, compression syndromes and traumatic aneurysms.

During two decades of hand surgery practice in LUTH, only two patients with Dupuytren's contractures and five with rheumatoid arthritis of the hand were attended in the Hand Rehabilitation Clinic. Lepromatous hand diseases were not referred to LUTH and no case of hand palsy from poliomyelitis was seen.

4.1 Complications of Emergency Hand Surgery

Injuries and acute pyogenic infections are the common surgical hand conditions treated as emergencies⁷ and in surgical outpatients in Nigeria. The results of such treatment are frequently attended by complications because of improper emergency care by the primary medical personnel.^{8,9} Since the initial management determines the extent of subsequent reconstruction and functional recovery of the hand, such personnel constitute a most important group, particularly in Nigeria where there is only one hand surgeon and few surgeons with special interest in hand surgery, to a population of more than 120 million. These primary personnel include:

- Native surgeons
- Chemists
- Community health workers
- Nurses and midwives
- Casualty officers
- General practitioners

We have made efforts over the past twenty years with limited success, to disseminate guidelines and steps of initial management of hand

injuries and infections by the first medical personnel to attend to the patient. An intensive educational campaign concerning this issue would reduce the incidence of such misguided initial treatment which may doom the patient to life-long disability.^{8,10} We are in search of substantial human and financial resources to enable us effectively carry out this educational campaign.

U. L. ARCHIVE

5.0 COMPLEX RECONSTRUCTION IN HAND SURGERY

Most of the cases seen in our practice are complex hand problems or cases that had been made complex from previous surgical treatment. It is certainly safer if the patient is initially treated by a hand surgeon, a rare probability in Nigeria. Then the hand, most times if not all the time, can be restored to the normal position, functionally and cosmetically.

5.1 Reconstruction of complex burn contractures

Contractures may be caused by healing of a wound where tissue has been lost without replacement of tissue. To heal itself without replacement of lost tissue, the wound pulls and borrows from the surrounding tissues including skin where available unto itself by producing fibrous tissue (fibrosis).

This occurs when a deep burn wound is permitted to heal by second intention, without replacement of lost skin with autogenous skin graft. Such a wound when healed, develops varied degrees of contractures, exuberant hypertrophic scarring, cutaneous hyper- and or hypo-pigmented areas (hypochromasia). There is extensive fibrosis, abnormal dermis and attenuated epidermis from flame burn and its complications. When the contracture is near a joint, the joint becomes fixed in an abnormal position.

This was the presentation in both hands and upper limbs of a 19 year old female polytechnic student who sustained severe flame burns with other passengers in a molue bus explosive fire disaster on the third mainland bridge in 1985.

The primary objective of surgical intervention in such cases is to achieve satisfactory hand function. Cosmesis which is also desired, especially in ladies, is considered secondarily. At surgery, the original wound defect is recreated and appropriate amount of lost tissue is sought for in several ways including autogenous free skin grafts, local flaps, distant flaps, axial pattern flaps and free flaps to ensure success. All these methods of skin replacement, except free flap were employed for coverage in this patient as demonstrated in the slides. Satisfactory function was restored to her hand.

5.2 Pollicisation of index finger (creating a new thumb)

A case of acquired or secondary '*pouce flottant*' (floating thumb) of an 18 year old athletic male, caused by poorly managed hand infection, a thenar space abscess is presented. The infection developed multiple complications of osteomyelitis, sequestrum formation and total loss of bony frame of the thumb, resulting in a 'floating thumb'. A floating thumb is more frequently caused by congenital malformations. It is an indication for pollicisation of the finger; that is, creating a new thumb from another finger to maintain thumb function.

When '*pouce flottant*' is caused by congenital malformation, the tissue anatomy and the fascia planes are relatively normal and predictable. But this is not so in acquired '*pouce flottant*' in which there is severe tissue fibrosis from inflammatory reaction and impaired blood supply resulting in distorted hand anatomy, including displaced or occluded digital blood supply. This makes the surgical operation of creating a new thumb much more difficult, especially in the absence of angiographic delineation and visualisation of the blood supply as occurred in this patient.

The pre- and post- operative status of the hand are illustrated. A very functional thumb was constructed.



Fig. 2: Infection of the thenar space, complicated by osteomyelitis, pyogenic arthritis and bone extrusion.



Fig. 3: Immediate post thumb metacarpal and phalangeal sequestrectomy. Note the proximal drain of a sleeve of surgical rubber glove.



Fig 4: Progressive healing of thumb wound.

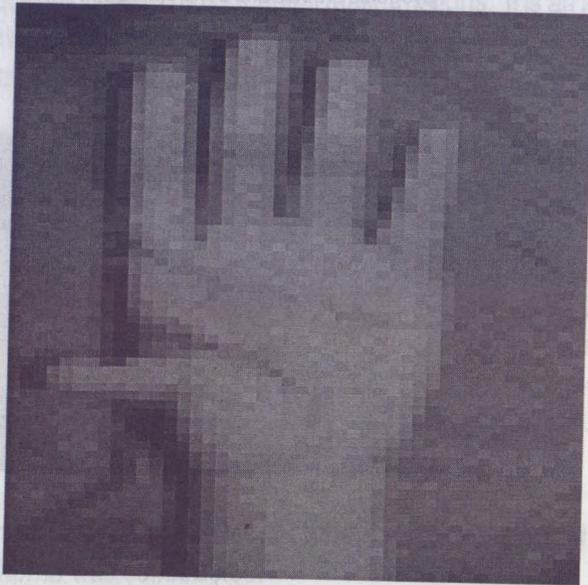


Fig. 5: Acquired or Secondary floating thumb (pouce flottant) a functionless thumb resulted

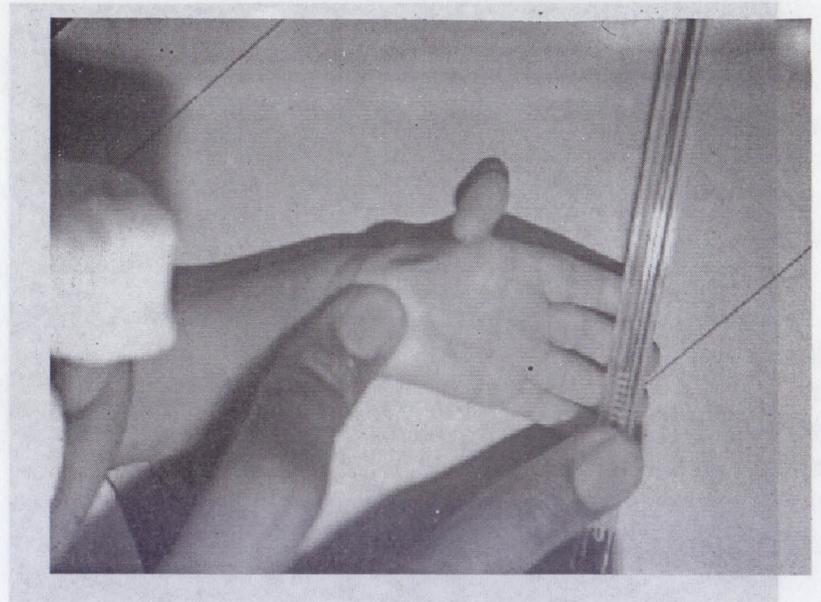


Fig. 6: Congenital floating thumb (Pouce flottant)



Fig. 7: Immediate post operation Dorsal hand view

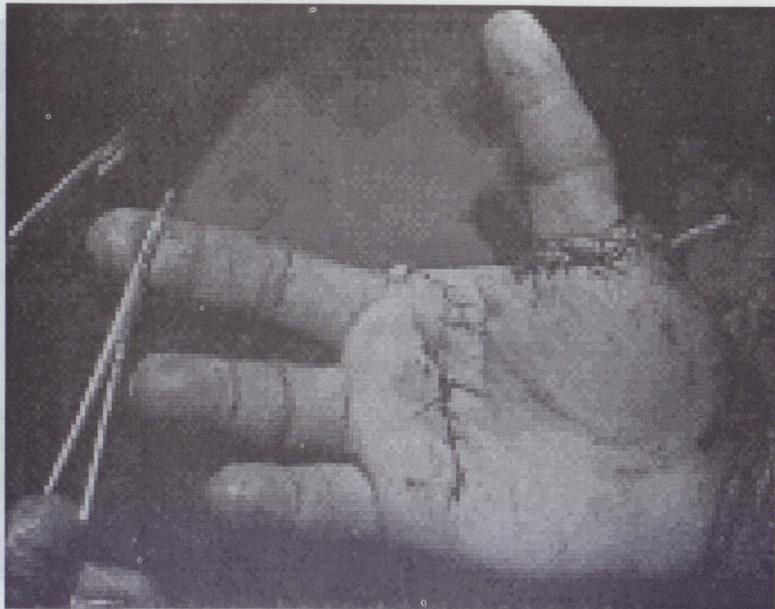


Fig. 8: Immediate post operation Volar hand view

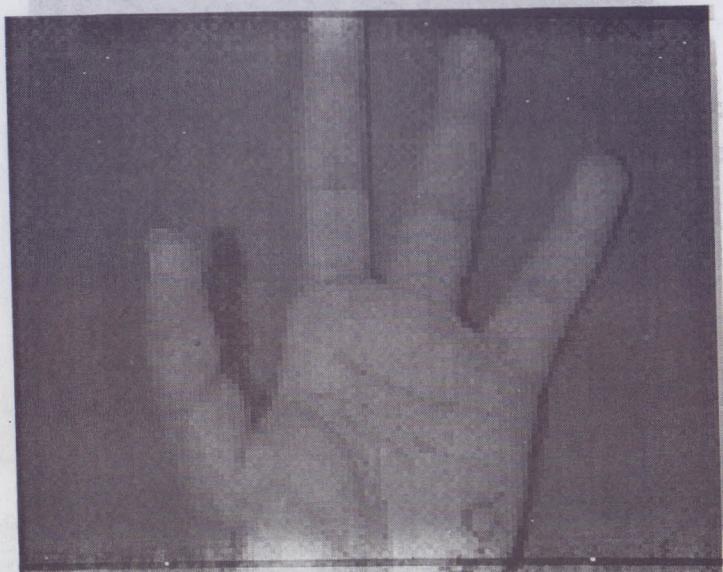


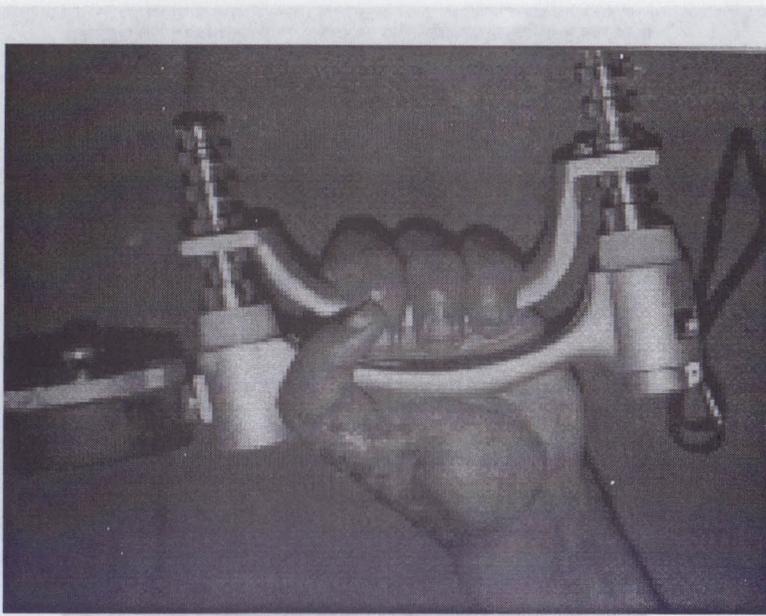
Fig. 9: Healed palmar wounds



Fig. 10: Healed dorsal wounds of the hand



Figs. 11 & 12 show the hand holding a drinking glass



Figs. 13 & 14 demonstrate good grip power.
Note that there are four fingers in the hand

5.3 Repair of complex syndactyly (Apert's acrocephalosyndactyly)

Apert's syndrome consists of congenital malformations of abnormal facies, early fusion of cranial sutures and complex fusion of digits of the hands and feet. The fusion is not only of the skin, but also of other structures such as digital nerves, blood vessels, tendons bones and joints.

In the most severe form, there is 'cupping or spooning' of the hand as the shorter fingers with relatively slower rate of growth, pull down the longer fingers to which they are closely bound. This gives the picture of a "gari drinking" hand. We have seen six patients with this condition in the Hand Rehabilitation Clinic and separated the complexly fused digits resulting in relatively satisfactory use of the hand by the children, as shown in the pictures.

5.4 Secondary tendon graft - Zone II

Tendon surgery may involve repair of injured tendon, end to end, tendon graft or transfer of the tendon and its muscle. The key to success of such surgery is adequacy of innervation and blood supply to the muscle and tendon. The length of the tendon must be right; not too long and not too short and must be able to glide smoothly whenever the muscle contracts.

Difficulty with gliding is a major problem when injured tendons are repaired in Zone II area of the palm, where two tendons of the flexor digitorum superficialis and profundus course snugly beneath the tendon sheath. In the palm, Zone II is the area within the flexor retinaculum, from mid proximal phalanx to the neck of the metacarpal.

It is now generally agreed that with accurate microsurgery techniques, primary repair or delayed primary repair is the treatment of choice for all zone II tendon injuries. Zone II tendon injuries was previously never repaired primarily but by secondary tendon grafting, using palmaris

longus tendon, several weeks after the wound is healed. We still routinely perform secondary tendon grafting for late Zone II injury; in this area referred to as "no man's land" by Bunnell.

A 38 year old lady had multiple tendons slashed in proximal Zone II area of her palm with broken mug. The tendons were given delayed primary reconstruction six days after, the wounds were debrided by another surgeon who wisely referred the patient to us after skin closure, leaving the tendons unrepaired.

We repaired all transected tendons and digital nerves in Zone II after seven days (delayed primary repair). The result was quite good as judged by function and cosmesis.

5.5 Peripheral nerve surgery

The central nervous tissue of brain and spinal cord is like tooth paste, which once violated does not regenerate and cannot currently be repaired. This may inform the enclosure and protection within the bony cages of the skull and vertebral bones respectively.

However, peripheral nerves, i.e. the "nerve cables", which conduct stimulus to and from the central nervous system and end organs, when properly repaired, do regenerate, albeit slowly at about 1mm per day. The closer the site of nerve injury is to the target organ, the better the prognosis for full recovery. Rehabilitation measures, e.g. direct stimulation must be maintained to keep the muscle alive before the regenerating nerve reaches the target organ. Otherwise the target organ becomes atrophic or fibrotic and cannot be made to function by the regenerated nerve. When the nerve is uprooted from its root, or when the nerve injury is caused by traction, the prognosis of treatment can be poor.

We repair peripheral nerves regularly, especially in the upper limb using microsurgery; and our patients are generally satisfied with the

functional and cosmetic results attained in these complex cases. The results are even better if surgical intervention is early.

6.0 BEWARE AND BE AWARE

If anything can go wrong, it will (Murphy's law). Hence, the onus is upon the surgeon to ensure that nothing can go wrong. To prevent things going wrong, he must pay attention to clinical details and cultivate a high index of suspicion even for seemingly minor clinical changes. Unrecognized body reactions usually had occurred long before clinical manifestations.

6.1 Beware of hand infections

Hand infections should be taken seriously because simple cases of whitlow such as paronychia and felon, when not well attended, can result in a severely handicapped or crippled hand.

The handicapped hand of the 18 year old male patient presented earlier, whose thumb was destroyed and had to have a new one created, was due to neglected and poorly treated simple thenar space infection and the ensuing complications. Hence, minor infections of the hand must be aggressively treated.

6.2 Beware of small wounds including punctures

Puncture wounds in any part of the body, stab knife or nail punctures, predispose to destructive anaerobic bacterial proliferation and infections because of the deep and narrow tract of the wound lacking oxygen. In addition, a seemingly innocuous puncture wound in the hand is liable to damage a vital structure such as a vessel, tendon or nerve.

A small puncture wound in the proximal mid radial palm is liable to destroy the recurrent motor branch of median nerve to the thumb muscles. This would paralyze the opposing, pinch, hold and grasp actions of the thumb, severely reduce hand function and cripple the hand.

6.3. Beware of recurrent bleeding in the hand

Repeat bleeding in the hand from any cause should be viewed with concern and expert medical advice sought. This may be an ominous sign of formation of pyogenic granuloma lesion, development of pulsating haematoma (traumatic aneurysm) or evidence of cancer in the hand.

6.4 Beware of glass

Glass injuries of the hand and wrist, apart from tearing the skin, often damage vessels, tendons and nerves.

In a study of peripheral traumatic neuropathy of the upper limb in Lagos, we found that various forms of glass, window and door glass panes, sliding door glass, furniture glass and mirrors, auto glass and broken bottles were responsible for over 46% of peripheral nerve injuries^{11,12}

6.4.1 Domestic glass

We also reported in the same publication that nerve injuries of the hand occurred three times more frequently in Nigerian homes than in factories and offices. Domestic architectural glass, i.e. window and door louvers, was responsible for 60% of all glass lacerated nerves in the study.

Glass accident at home, severe enough to cause nerve damage, were twice as common in persons aged 16 – 40 years than in children up to 15 years. Yet the latter group is more prone to accidents in homes. The ulnar nerve, which was more frequently injured than other nerves, may be assumed to be injured in any severe household glass hand trauma in Nigeria until proven otherwise. Such wounds are usually located at the wrist.

We have recommended strict glass safety regulations including the use of safety glass in vulnerable areas; i.e. tempered or laminated, instead of annealed glass. The latter forms splinters when broken and is liable to cause soft-tissue wounds.

6.4.2 'Danfo' glass

If the "danfo" driver willfully hits, indents and wickedly brushes your beautiful car with his rickety "danfo" vehicle, and you must vent your anger and frustration, consider all other options except one.

I will not advise you to step on his head and twist his neck as he prostrates for you in mock remorse; nor will I advise you to use your shoe heel to break the glass of his already broken "danfo" into pieces. But, never in rage, controlled or uncontrolled, use your hand or fist to smash his windshield or door glass, for triple jeopardy may befall you.

While sympathisers are struggling to arrest bleeding in your mutilated hand and wrist, take you to hospital and search for a hand surgeon, the "danfo" driver sneaks away with suppressed laughter. If major vessels, tendons and nerves have to be operated, your hand may be out of use for a whole year, you pay a heavy surgeon's bill and your car, no longer so beautiful, still has to be repaired.

6.5 Be aware of pain in the hand

Pain is a most unpleasant experience. It is a response of body tissues to a state of ill health, be it organic (specific) or emotional (non-specific). It is a useful diagnostic clue in adults. The severity or degree of pain is difficult to determine; and it is even more difficult to determine the type or quality of pain.

Though pain is a subjective symptom readily influenced by human emotions, it is objectively mediated through the peripheral and central nervous systems. The threshold of pain is as diverse as the number of individuals ranging from low to high.

The surgeon is in a vantage position to provide dramatic relief to some patients in severe pain; for example, the acute inflammatory pain of appendicitis is dramatically relieved with appendicectomy. The acute

ischaemic pain of strangulated inguinal hernia and of ectopic pregnancy is alleviated by herniorrhaphy and surgical evacuation respectively. The acute persistent pain of herpes zoster is also removed, albeit temporarily with corresponding cutaneous nerve block.

Pain in the hand may be caused by infection, as in whitlow, e.g. paronychia or acute blue blood under the nail, sub-ungual haematoma, caused by trauma, e.g. in slamming a door on a finger. Paronychia, an infection of the soft tissue fold around the fingernail is treated with appropriate antibiotics, analgesics, elevation of the hand and incision and drainage if abscess is formed. Pain of sub-ungual haematoma is dramatically relieved by simple drainage with fenestration of the nail.¹³ Some relentless pain conditions are peculiar to the hand, e.g. pain of sub-ungual glomus tumour and pain of reflex sympathetic dystrophy (RSD) or causalgia.

6.5.1 Pain of glomus tumour

Glomus tumour is usually a tiny tumour not visible to the naked eye occurring beneath the fingernail or in the pulp of the finger. It subjects the patient to excruciating pain from the finger.

A 30 year old lady had this pain relentlessly in the pulp of her little finger for over a year. The pain was aggravated by cold, harmattan weather, air-conditioning and fanning. She always wrapped the finger in a thick woolen muffler when travelling in airplanes to reduce the severity of pain provoked by the cold atmosphere. She had stopped drinking iced water and alcohol including chilled wines, which made the pain worse.

She was becoming a social recluse because of the non-relenting pain and the change in her normal habits. She had consulted several orthodox and non-orthodox medical practitioners without relief. Potent

analgesics gave only very temporary respite. She had been advised by some friends and relatives to seek psychiatric counselling and by others to see religious leaders for spiritual healing.

The finger was operated and the sub-ungual lesion was removed micro-surgically. The unbearable pain and temperature hypersensitivity disappeared immediately post-operative and the patient returned to her normal life style.

6.6 Beware of small lumps in the hand

A 23 year old Nigerian female youth corper presented in January 1983 to a private hospital had a 7 month history of a cystic lump on her left middle finger. The lump was excised, and the histologic findings were benign giant cell tumor or synovioma.¹⁴

The patient returned 3 months later with nodular recurrence of the tumor and was referred to our Hand Rehabilitation Clinic for management. The recurrent tumor was located in the middle of the finger extending antero-posteriorly. It had three nodular areas and a palmar scar from the previous operation. An X-ray film of the finger showed only pressure effects of the tumor on the flexor surface of the phalanx. There was no palpable axillary lymph node and the findings of the chest X-ray were normal.

A repeat excision biopsy was performed, and the recurrent tumor, which had no capsule but firmly attached to the skin, was excised with the involved lateral digital neurovascular bundle. Complete removal of the tumor was probably not achieved. Primary skin closure was possible and was followed by satisfactory healing.

The histopathologic report of this specimen was malignant sarcoma. A review of the slides of the previous excision biopsy in the private hospital confirmed the benign nature of the original tumor. Digital amputation was advised. The patient refused, defaulted, but appeared

3 months later, having had the involved digit amputated in a London hospital. A routine chest X-ray film at this time revealed two large pulmonary cannon ball metastasis in the left lower lung field.

She was started on chemotherapy with vincristine, dactinomycin and cyclophosphamide. She again defaulted, and her obituary was published in one of the Nigerian national newspapers 3 months later.

Be aware and beware that a small lump in the finger can cause premature death.

6.6.1 What is the aetiology of cancer?

What is the cause of cancer? In spite of extensive research the causation of cancer still remains elusive. What is the role of inflammation in the progression to cancer? Can cancer develop de novo or must there be a benign intermediary lump?^{15,16}

The cancer of the young lady presented above developed within 3 months of removal of a benign synovioma while receiving surgical treatment. What then caused the malignant change from benign synovioma to malignant synovio-sarcoma? Could it be the trauma of the surgeon's knife that provoked the change? This case was presented along with other similar ones in a paper titled "*Malignant transformation of benign hand tumours*" at the Scientific Meeting of the British Society for Surgery of the Hand in October 2001 in London.

6.6.2 Beware of volar ganglions of the wrist

Ganglions constitute 56% of soft tissue tumours treated in the Lagos University Teaching Hospital. They are benign soft mucin-filled cysts usually attached to the adjacent underlying joint capsule, tendon sheath or tendon; and are more frequently located in the dorsal aspect of the hand and wrist (81%) than in the volar aspect.¹⁶

When a volar wrist ganglion is being surgically removed, the risk of serious complications occurring is higher than when operating on dorsal

ganglions. The typical volar wrist ganglion is often in close proximity to the radial artery and it may be adherent to it or to a branch of the vessel. In one of our cases, a very tiny branch of the radial artery fed the pulsating ganglion and the mucin in the cyst was haemorrhagic in colour.

Regardless of the location, ganglions rarely recur when properly removed; but when improperly or incompletely excised, 50% of cases may recur. Hence it is advisable that surgical removal of ganglions should be by specialists in the field.

7.0 MEDICAL EDUCATION

The implementation of the current curriculum of the College of Medicine, University of Lagos began in 1979, the year I took up employment in the University of Lagos. I was thrilled that newer methods of assessing medical education, which operated in only few medical schools worldwide, was already commencing in Lagos; and I was glad to be part of the new development.

You may recall that the curriculum attracted much debate nationally and internationally for several innovative reasons, including the following.

- It is a primary healthcare oriented curriculum
- The period for teaching and learning the pre-clinical courses of anatomy, physiology and biochemistry was reduced from four semesters to two semesters; later modified to two and a half semesters.
- A new course in Basic Therapeutic Skills was for the first time commenced at the 200L. This differs from the course in Basic Clinical Skills (Introduction to Clinical Medicine) taught at 300L.
- Methods of Structured Assessment and Examinations, including objective structured clinical examinations (OSCE) were commenced.

7.1 The Course in Basic therapeutic skills (BTS)

I was given the opportunity to be the chairman of the *ad hoc* committee, set up by the Provost, Prof. Ade Elebute, to develop the Course in Basic Therapeutic Skills for (200L) medical, dental and physiotherapy students in 1979. Other members of the committee were from the institute of child health and primary care, the school of nursing, departments of occupational therapy, medicine, dietetics, medical social work, prosthetic and orthotic unit. Also represented were the departments of paediatrics, dentistry department and physiotherapy.

The course was designed to teach basic medical procedures in Nursing, first aid, Medicine, Surgery, Paediatrics and Dentistry. It also introduced the students, early in their medical, dental or physiotherapy training, to the roles in treatment and rehabilitation of dietetics, physiotherapy, prosthetics and orthotics, occupational therapy and medical social work. Basic Therapeutic skills, is separate from Basic Clinical Skills, the basic introduction to Clinical Medicine proper, which is taught at the 300L.

Research was built into the implementation of this curriculum culminating in several publications on medical education by us.^{17,18,19,20} These, along with publications of other authors in the College, has placed the University of Lagos in the forefront of scientific discourse on medical education in Nigeria and internationally.

OSCE has since become a routine and a very effective method of examination in the School of Clinical Sciences, especially in the Department of Surgery. Although it is teacher and material intensive, it has enabled us to examine large numbers of medical, dental and physiotherapy students within a short period of time. Other Medical Schools in Nigeria have been slow, but they have surely begun to adopt this structured system of clinical examinations, pioneered in Nigeria by the University of Lagos.

7.2 What anatomy shall we teach medical, dental and physiotherapy students?

It is pertinent to ask what should be the content of anatomy, biochemistry and physiology syllabus for medical students, now that the period for teaching the subject has been drastically reduced by almost a half. The teaching of anatomy into minute details as for postgraduate students was probably excessive for the objectives of the undergraduate MB, BS and BDS degrees.

Aberdeen graduates rated anatomy, as being excessively taught²¹ while McMaster University graduates reported that exposure to basic sciences including anatomy was inadequate.²² In the Lagos curriculum, reduction in the time allotted to the teaching of anatomy means reduction in anatomy content knowledge that can be presented.

This was the basis of our study,²⁰ that built anatomy course content around points of contact with patients and clinical practice. The findings in the study reveal that this approach is result oriented and may solve the question of relevance of subject matter to be learned in subjective clinical teaching.

7.3 Feedback: are products of CMUL not interested in postgraduate training?

A preliminary feedback from the performance of graduates of the College of Medicine, University of Lagos suggests that the objectives of the current curriculum are being achieved, namely, the production of doctors and dentists of high quality and in such numbers as are required to meet the health care delivery needs of Nigeria at community and hospital levels. The institutional goal of the previous curriculum at the inception of the medical school was to produce doctors and dentists of "high repute and internationally acceptable qualifications". However, it would appear that the doctors from the current curriculum are not about forth coming in research or postgraduate training. For example, only 50% of a total of 46 surgeons in training in the Department

of Surgery of the University of Lagos graduated from our medical school.

7.4 Medical Student: clinical-laboratory research

Medical students have contributed, in the past, to knowledge through clinical and or laboratory research. The student has an idea, which he puts into thought and hypothesis. He searches the literature to concretise the hypothesis and seeks the guidance and assistance of his teachers to satisfy his curiosity and prove the hypothesis.

Such was the process that led to my clinical-laboratory research on trophoblastic disease, ²³ cancer of pregnancy, as a 3rd year medical student in 1967 at the University College Hospital (UCH) Ibadan. J.P. de V. Hendrickse, a Professor of Obstetrics and Gynaecology, permitted me to use his patients and laboratory for the investigations. Urine samples of these patients were assayed for the hormone, human chorionic gonadotropin, as a marker of the remission or non-remission of cancer before and after treatment with anti-cancer drugs, 6-mercaptopurine and methotrexate.

Human chorionic gonadotropin (HCG) is a hormone believed to be produced by the cytotrophoblast. As the name suggests, it stimulates the gonads and has a luteinising action. When this study was performed in 1967, the qualitative estimation of HCG was extensively employed in the diagnosis of pregnancy while quantitative assay was invaluable in the diagnosis and control of therapy of trophoblastic disease, which is common in Nigeria.

The laboratory quantitative assays used were the method developed and introduced by Professor D.M James of the Department of Pharmacology, University of Ibadan. The method was based on the principle that a suspension of red cells, sensitised with HCG and agglutinated by anti-HCG rabbit serum can be 'disagglutinated' by addition of further HCG, for example in urine or serum. Serial dilution

was done and tested for HCG concentration. A summary of the result is presented in the graphs on the slides

Today, much easier sophisticated methods of radioimmunoassay are now employed for the qualitative and quantitative assay of human chorionic gonadotropin hormone in the serum.

The paper from this study, ²³ very early in my medical career, gave me some scores during my promotion exercise to Associate Professor of Surgery in 1991. I therefore wish to encourage all students, especially those in the medical school by saying 'go to it' and prove your research ideas and vision. Do not be disillusioned or daunted by the things you hear or see, for Nigeria is destined to become one of the greatest nations on earth.

One would have thought that this detailed contact with obstetric diseases, early in my medical career, would have propelled me into specialisation in Obstetrics and Gynaecology. This was not to be, because the smell of amniotic fluid (birth water) did not find favour in my nostrils.

| | | | |
|-----|--------------------------|---|----------------|
| 11. | Prof. Phillipa A. Okeowo | Otorhinolaryngology: From Obscurity to Excellence | 22nd July 1988 |
| 10. | Prof. Dominic N. Okegbe | Footprints in the Sand: A story about life in the Man and Others | 14th Jan, 1988 |
| 9. | Prof. F. de Rodas-Vicko | in an Academic Setting | 6th Nov, 1988 |
| 8. | Prof. B. A. Adedeji | From Chieftain to Scientist | 9th Dec 1988 |
| 7. | Prof. G. O. Sowemimo | A matter of Life and Skin Cover | |

**8.0 INAUGURAL LECTURES: DEPARTMENT OF SURGERY
COLLEGE OF MEDICINE UNIVERSITY OF LAGOS
(1968 – 2003) Table 1.**

| S/N | Lecturer's Name | Title of Lecture | Date |
|-----|--|--|-----------------------------|
| 1. | Prof. H. Orishejolomi Thomas | A Surgeon Among the Academics | 17 th Jan., 1968 |
| 2. | Prof. Akin O. Adesola | The Academic Medical Center: Is the patient a Guinea Pig? | 16 th Jan., 1975 |
| 3. | Prof. E.Ade Elebute | The Making of an Academic Surgeon | 12th Nov., 1976 |
| 4. | Prof. Paul Omodare | The University Depart- ment of Surgery in Contem- porary Nigerian Society. | 11 th Nov., 1977 |
| 5. | Prof. Erete O. Amaku | That Water May Flow | 14th May, 1986 |
| 6. | Prof. M.O.A. Jaja | The Halt in Society | 10th June, 1987 |
| 7. | Prof. G.O.A. Sowemimo | A matter of Life and Skin Cover | 13th June, 1990 |
| 8. | Prof. Bashir Akande | The Knife, Thread, and Medicine: From Craftsman to Scientist | 9th Dec., 1992 |
| 9. | Prof. J.T. da Rocha-Afodu | The Art and Science of Surgery in an Academic Setting | 6th Nov., 1996 |
| 10. | Prof. Dominic N. Osegbe | Footprints in the Sand: A story about Infertile Man and Others | 14th Jan., 1998 |
| 11. | Prof. Phillips A. Okeowo | Otorhinolaryngology: From Obscurity to Excellence | 22nd July, 1998 |
| 12. | Prof .H. Olusanya Adeyemi-Doro | The Hand Mirrors the Man | 17th Dec., 2003 |

Table 1 shows the list of inaugural lectures from the Department of Surgery, College of Medicine of the University of Lagos delivered from 1962 to 2003.

U. L. ARCHIVE

The first, titled "A Surgeon Among the Academics" was given by H. O. Thomas on the 17th of January 1968; the second was delivered by Akin O. Adesola, titled "The Academic Medical Center: Is the Patient a Guinea Pig?" on the 16th of January 1975. The third, titled "The making of an Academic Surgeon" was given by Ade Elebute on the 12th of November 1976. The first three lectures made the expression, the "academic surgeon" popular in the universities.

Please join me in paying tribute to these three pioneers of surgery in the University of Lagos. Their noble role as trail blazers is indelibly stamped in the annals of the University of Lagos.. Two of them are alive and well and are here today (Prof. Emeritus Akin Adesola and Prof. E. Ade Elebute).

It was only the lectures of these three 'musketers' that I was not privileged to listen to, as I had not joined the University when they were delivered. But I was in this hall listening to the other inaugural lectures from the time of Erete Amaku, "That Water May Flow" to "The Arts and Science of Surgery" which was delivered by John Taiwo da Rocha-Afodu, 18 years after attaining the professorial chair.

As for me, H. Olusanya Adeyemi-Doro, I feel good and grateful that it has pleased God in His mercy for me to be counted among these surgeons of the University of Lagos.

9.0 MISCELLANEOUS

I have performed very many exciting surgical operations in my life time; exciting in many ways including the attending risks of surgical operation, the joy and satisfaction shared with the patient and relatives for good results and the pangs of facing them for inadequate results

usually beyond one's control. To achieve a hundred percent success rate, a surgeon must approach every procedure as his first case.

Some of these wonderful procedures were performed as a house officer and senior house officer at Ogbomosho Baptist Hospital and Eku Baptist Hospital in 1971/1972. Some were performed at Homer G. Phillips Hospital, St. Louis Missouri, as a resident and Chief resident in surgery. The rest, I performed as a Lecturer Consultant in the College of Medicine, University of Lagos and Lagos University Teaching Hospital. Two examples are given.

9.1 Expanding and leaking traumatic axillary artery aneurysm

This is in the field of peripheral vascular surgery. A 30 year old male farmer was referred from Enugu with a large pulsatile mass in the left anterior infraclavicular chest. An armed robber had stabbed him with a long dagger in the posterior axilla. The mass, which was 13x10cm in size, had a bruit and was increasing in size. Emergency trans aortic angiography demonstrated a large multilocular false aneurysm of the axillary artery. Endoaneurysmorrhaphy with intrasaccular ligations of bleeders was done using 3-0 prolene sutures.²⁴

The striking feat about this operation is that it was performed without a cardiac bypass machine, which would have made the operation much safer to carry out. No such machine was available in the country at the time, and the patient was destined to bleed to death from a ruptured aneurysm if nothing was done. The patient did well and was discharged home ten days after surgery.

My boldness in this procedure was encouraged by my Surgical assistant Dr. Fajolu, a cardiothoracic surgeon, now relocated in the U.S.A.

9.2 Giant abdominal-dermolipectomy and herniorrhaphy

A 39 year old obese patient developed a large central abdominal hernia with a huge ventral flap of adiposity (**abdominal apron**). She also complained of heartburn (burning epigastric sensation). Several surgeons refused to operate on her abdominal hernia because of her obesity.

After proper pre-operative preparation including hematology, biochemistry and nutritional profiles as well as dietary management, she was operated upon. Using a single supra-pubic transverse incision, the huge defect in the anterior abdominal wall was repaired, the umbilicus was relocated and a 3 kg skin and fat was excised from the lower abdomen. Pre-and post-operative pictures are shown.

She felt much better post-operatively. Her weight was reduced, heartburn improved, and she liked herself better in the mirror. Her husband was happy and no longer complained of obstruction to sexual access.

9.3 Importation of 'mercenary' surgeons

A none governmental organisation and foundation has put in place elaborate plans to import plastic and reconstructive surgeons into Nigeria to operate on various forms of malformations of children, without the involvement of the Nigerian Association of Plastic Reconstructive and Aesthetic Surgeons (NAPRAS) or any of the members.

The NAPRAS consists of seasoned and very active plastic reconstructive and aesthetic surgeons from all over the country who are better able to operate on these children and successfully follow them up, even at costs much less than the quotations from the foundation. The NAPRAS has just concluded the 9th Scientific Conference and Annual General Meeting hosted by the Department of Surgery, College of Medicine University of Lagos, from the 5th to 8th November, 2003.

It would appear that this Foundation has aggressively been soliciting the support of the Presidency, the First Lady, State Governors, their wives and some influential people in Nigeria. I urge all involved not to be part of any arrangement that will tarnish the image of the seasoned and dedicated plastic, reconstructive and aesthetic surgeons in the country. Such an arrangement will not only bring disrepute to Nigeria but will provide less than optimum reconstructive surgery for our children.

10.0 TÂCHE INCOMPLÈTE

The drum has not ceased. The beat goes on strong; for there are issues not yet completed.

10.1 Training of Hand Surgeons

We have not succeeded until now in training hand surgeons for Nigeria and the Economic Community of West African States. I wish to thank the Chief Medical Director, Prof. Tolu Odukoya and the Chairman of Medical Advisory Committee, Prof. Oladele Arigbabu, for permitting us to commence a Fellowship training programme in Hand Surgery.

Two candidates who have fulfilled the prerequisites have received approval from the administration; and one has already commenced active training. We look forward to the production of the first Hand Surgeon trained and certified by the College of Medicine, University of Lagos and the Lagos University Teaching Hospital in about a year from now.

10.2 Emergency surgical services

Pre-hospital emergency service (PHES), rapid response trauma management and trauma care systems are dangerously unattended health issues in Nigeria. We have been consistent in advocating the appropriate methods of emergency care services that need to be put in place in Nigeria;^{25,26,27,28} so as to reduce the death toll from road accidents, and sporadic acquired disasters, including fire disasters, and bomb explosions.

We anticipate that the Federal Road Safety Corps will justify the return of their autonomy by ensuring a dramatic reduction in the accidents and death toll on Nigeria roads.

10.3 Manual of Emergency Surgery

The new edition of the book, *Manual of Emergency Surgery*, is in preparation. The manual was first published in 1991 by the University of Lagos Press. The manual has been used and found helpful by medical students, general practitioners, nurses and residents in surgery training.

The first publication was made possible with the assistance of the Chairman of the Senate Publications Committee at that time, Professor David Aradeon and the retired Managing Director of the University of Lagos Press, Barrister Bodunde Bankole. We anticipate completion of this new edition in the third quarter of 2004.

10.4 Developing a Hand Rehabilitation Centre

There is no single fully established Hand Surgery and Hand Rehabilitation Centre in Nigeria. It is only in the Lagos University Teaching Hospital that a strong Hand Rehabilitation Clinic has been established over the past 24 years.

It is our goal and hope that this clinic will be given greater recognition by the Federal Government and that it will be developed into a state-of-the-art Hand Surgery and Hand Rehabilitation Centre, to serve Nigeria and the West African sub-region. This is only appropriate because all the necessary services and units of the Hand Rehabilitation Team are already operating in LUTH.

11.0 Challenges

No academics ever attained the position of a professor without facing various challenges; some exciting and pleasant, some not so pleasant, and some almost leading to one's extinction. It is those who survive

the challenges that receive the laurel. There are two great challenges currently facing the Department of Surgery, College of Medicine, University of Lagos and the Lagos University Teaching Hospital.

11.1 Funding Department of Surgery – CMULLUTH

The first major challenge my surgical colleagues and I face is how to run the largest department in all Nigeria Universities without a kobo in any of the numerous departmental votes. Once in a while, we receive an imprest of N500.00 from the CMUL, which when retired may take three months to replace.

LUTH, a great consumer of our stationery and other wares, has not placed a kobo in any imprest account for the past two and a half years.

11.2 Surgical operations: the Lagos University Teaching Hospital (LUTH)

The second major challenge is even more serious than the first. This relates to how to assist the administration of the Lagos University Teaching Hospital in making it possible for surgeons to operate on patients as at when indicated. The rate of cancellation of operations is now alarming and portrays abject neglect of patients bordering on wickedness. The waiting list for elective surgical operations in LUTH is now between six months and two and a half years for routine operations that do not require highly sophisticated equipment.

I repeat here, that there can be a reversal of the downward fate of LUTH only if the surgeons including dental, obstetrics and gynecology surgeons are enabled to operate promptly. This will drastically eliminate the poor financial status of the hospital and reduce the suffering of surgical patients.

It will also eliminate the adverse effects on the training of our undergraduate medical students as well as the training of postgraduate surgery registrars. The West African College of Surgeons and the

National Postgraduate Medical Colleges gave us only partial accreditation of two years and one year respectively for surgical training at their last visits. This is partly because the number of cases operated are much below the significant number.

Unfortunately, the situation has grown worse and we need a dramatic turn around if we are to be accredited at the next visitations.

12.0 RECOMMENDATIONS

• Undergraduate medical students and research

Medical students are an invaluable store of ideas and hypotheses and should be encouraged to participate in research.

• Laying hands on patients

The noble function of laying hands on patients should not be abandoned to electronics. All medical practitioners, especially surgeons, should continue to lay hands purposefully and diligently on their patients while enriching their diagnostic and therapeutic skills with electronic advantages.

Medical Students' Registrars, Consultants and all Medical Practitioners in Nigeria, more than before, need to pay extra attention to clinical details rather than extreme of electronics, so that giant contributions to medical knowledge can be made even in this supersonic age. Indeed, we should not be in a haste to discard the 'laying of hands' for the extreme of technology and electronics, which is devoid of human touch and feelings.

• Undergraduate Curriculum of the College of Medicine, University of Lagos

The current curriculum of the College of Medicine, University of Lagos has been implemented for 24 years and is due for

evaluation. It is recommended that the Provost and College Deans set up controlled research to assess the performance of our graduates. This will enable objective but guarded modifications in areas of deficiency, e.g. motivation of students to undertake postgraduate studies.

The Lagos University Teaching Hospital surgical operating theatres

It is an emergency task for the Chief Medical Director of the Lagos University Teaching Hospital to make it possible for surgeons in LUTH to operate on patients regularly as emergencies and electives. This will restore the dwindling confidence of patients in the hospital services and improve its finances. But very importantly, it will avert the looming dis-accreditation of our surgery training programmes by the National, as well as the West African Postgraduate Colleges. In this regard the government is urged to come to the aid of LUTH urgently.

Mercenary surgeons

It is recommended that the Presidency, first Lady, State Governors and their wives, and all philanthropists interested in providing plastic reconstructive and aesthetic surgery for numerous Nigerian children with malformations, should relate with the Nigerian Association of Plastic, Reconstructive and Aesthetic Surgeons (NAPRAS). The association will ensure that the noble objectives of the first Lady and all other well-meaning groups or individuals are met.

Glass safety regulation

Strict glass safety regulation is recommended including the use of safety glass in vulnerable areas, i.e. tempered or laminated instead of annealed glass, which forms splinters when broken, and is liable to cause soft tissue wounds.

Emergency Medical Services and Trauma Care

There is a very urgent need for the State and Federal governments to establish pre-hospital emergency services (PHES), regional trauma systems with in-built trauma registry and rapid response disaster management services. Separate budgets should also be allocated for the management of trauma systems and trauma victims.

We anticipate that with dedication and diligence in operations, the Federal road safety corps (FRSC) will justify the restoration of autonomy from the police by ensuring a dramatic reduction in the accidents and death toll on Nigerian roads

13.0 ACKNOWLEDGEMENTS

It is only proper for me to acknowledge and pay tribute to those who contributed to my academic career and life's journey thus far. Although it is not possible to name everybody in the limited space and time, I wish to say that I appreciate and thank all that have been involved positively in my life.

13.1 Peter Ogundoro Adeyemi – my father

I owe my disciplined family upbringing and sound primary and secondary education to my late father, Peter Ogundoro Adeyemi, a product of St. Andrews College, Oyo. He prepared me and ensured that I went to **Government College, Ibadan** for my secondary school education despite my itinerant primary school education in Otan-Aiyegbaju, Enugu, Oshogbo, Warri, Ibadan, and Ilaro.

Peter Doro, as he was fondly called by friends is a descendant of Ile-Onigbo, one of the three ruling houses of Otan-Aiyegbaju, Boluwaduro Local Government area in Osun State. He was a very special person in that he favourably touched the educational life of practically all children and teachers in Otan-Aiyegbaju, during his lifetime.

Although he died while we were still in primary and secondary schools, I salute late Peter Doro for the legacy of a good education and goodwill he left for us his children, all of whom are alive and well today. In appreciation, all his nine children adopted the compound name Adeyemi-Doro to honour him.

I acknowledge the presence of my mother here tonight. I thank you for suckling me on your breasts for about one and a half year non-stop. I also acknowledge the presence of my brothers and sisters, especially my brother-in-law, Mr. Akin Akindele, a retired Deputy Registrar of the University of Lagos and my elder sister, Mrs Adenike Akindele, a retired Assistant Manager, University of Lagos Bookshop.

13.2 My teachers

I wish to thank the following teachers who influenced my life positively one way or the other during my academic career: Prof. Jide Bademosi, Prof. Latunde Odeku, Prof. J.P. de V Hendrickse, Prof. Kelsy Harrison, all of the University College Hospital, Ibadan. Others are Dr. Doshier of Ogbomoso Baptist Hospital, Dr Nickels of Eku Baptist Hospital, Dr. A.D. Spencer, Chief of Surgery, Homer G. Phillips Hospital, St. Louis, Missouri, Prof. Todd Skoog of Akademiska Sjukhuset, University of Upsalla, Sweden, Dr Nicholas Barton of Queen's Medical Centre, Nottingham.

13.3 My wife and children

At this juncture, I wish to appreciate the support of my dear beautiful wife, Oluremi. All I can say is that I love you and I appreciate your love and loving. I thank you for your unquantifiable assistance in bringing up our children, all products of the University of Lagos.

Tolulope, a product of Prof. David and Susan Aradeon; Adekunle, MB.BS CMUL; Folasade a student of Chemical Engineering who left for overseas, thank you Prof. A. A. Susu and Prof. F. Olatunji; Adedotun, a graduate of the Faculty of Law; Prof. Akin Ibidapo-Obe I thank you.

Omobolanle (Omo B) final year student of the Faculty of Law and finally Adesina (Shyne) a student of the Faculty of Business Administration. Thanks to the diploma programmer of the University of Lagos and to Prof. Eddy Omolehinwa and Prof. Wole Adewunmi

13.4 The Nigerian medical uniform

In 1985, at my request, my wife designed a medical uniform with a native outlook for me. The uniform of simple white material has a top, a trousers and a cap. This uniform has served me well in my career. It is functional and comfortable to wear on ward rounds. A white long laboratory coat can readily be worn on it. It is very convenient for a surgeon as he changes his clothes in and out of the operating theatre. It has also served me well at conferences, be it local and international, especially when I read papers. Occasionally, when I proceeded from the hospital to a social function, it appeared better accepted than a suit. Indeed, some inquire about my white cap chieftaincy.

13.5 In search of Lecturer appointment in Nigeria

When the University of Ife, the University of Ibadan (my *alma mater*) and the University of Ilorin for uncertain reasons, side-tepped my applications for employment, it was the University of Lagos that was willing to take a risk on my potentials and readily gave me a job.

My longstanding friend, late Chief Segun Ojutalayo, may his soul rest in peace, prevailed on me to consider the University of Lagos for employment. He was aware that Lagos was not on the list of places that I desired to settle in Nigeria. He facilitated the way with Prof. E. Ade Elebute, who was the Provost of the College of Medicine, University of Lagos.

I was arraigned before a powerful interview panel that included late Prof. Odunjo, late Prof. Paul Omodare and late Prof. M. O. A. Jaja, of blessed memories. I was given a job as a Lecturer Grade I, though I had applied for the post of a Senior Lecturer. I received my letter of

appointment and confirmation of appointment promptly. Indeed, I cannot remember which of the two letters I received first; the letter of appointment or the letter of confirmation of appointment.

13.6 Other tributes

I also pay tribute to the following for their role in my academic, domestic and spiritual life.

- Mrs. Folasade Ojutalayo, who with her late husband, Chief Segun Ojutalayo permitted me the use of their garage to store my goods and books from USA for almost 2 years, as I waited for accommodation from the College of Medicine, University of Lagos.
- Prof. (Mrs.) Oyin Elebute for invaluable assistance in keeping my home front in order, especially with the education and health of my children.
- Prof. Kayode Odusote, for the stimulating times we had in the clinical and electromyographic evaluation of peripheral nerve injured patients at LUTH.
- Dr. Ephraim Adebola Ademowo, the Archbishop of Lagos Diocese 1. I thank you for permitting me a training experience in the Lagos Anglican Seminary.
- Ven. (Prof.) F. Fajemirokun, my teachers and my mates in the Special Seminary class; for the wonderful time in His presence.

13.7 Vice Chancellor

Finally, Mr. Vice Chancellor Sir, I thank you sincerely for offering me the opportunity to deliver my long overdue Inaugural Lecture this 10th day of December, 2003. I congratulate you for sustaining the regularity of Inaugural Lectures delivered in the University of Lagos.

Sir, please permit me to give all honour to Him whom honour is really due by saying; *'Ese, ibi te ti bere, Ese, ibi t'Eba de, A dupe o Jesu, Ibi t'enmu mi lo'*.

14.0 CONCLUDING

My lecture is now at its end. In concluding, I wish to implore you all to keep an eye on your hands from now on. Your comfortable living and indeed your life may depend on it. I pray that God Almighty enables you to make wealth with your hands. Amen.

I hope that you have enjoyed listening to me as much as I have enjoyed listening to myself. I thank you all and I say God bless you for listening; and especially for waiting to the end.

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DEDICATION



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