

# UDA

**UGANDA DENTAL ASSOCIATION** 

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### **OUR PRODUCTS:**







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### **Editorial**



Dr. TEFULA T KWAGALA

arm greetings and welcome to another issue of the UDA dental journal. Like all years, 2019 has been one of high ups and low lows for the dental fraternity. With God's grace, we have made it this far and we are glad for it.

We continue to thank you for your continued support towards the association. Moving forward, we hope, with your participation, to expand this journal in terms of reach and content.

We were blessed to have many CPD programs this year. Our sincere gratitude goes out to all the presenters who put in their time to prepare and present this valuable knowledge to us. We have included a few of the CDE presentations in here as refresher elements to those who were able to attend and as thought stimulants to those who were unable to attend. We hope to accommodate more presenters and participants in the coming year, in order to share greater volumes of knowledge among ourselves.

I would like to urge the entire dental fraternity to explore the avenues of dental research with more eagerness and zeal. The more knowledge we generate from within, the easier it will be to tailor our professional attitudes and proficiencies towards our patients needs.

I continue to implore you to participate in all UDA activities as we aim to create a stronger and more vibrant association.

Kind regards, Dr. TEFULA T KWAGALA BDS MAK EDITOR





### PRESIDENT'S MESSAGE

t is truly hard to believe how quickly a year has passed since you trusted us with leadership. It was certainly a busy year, which is probably why it passed in the blink of an eye. To recount, we had numerous successful meetings with other organizations, such as the Uganda Medical Association (UMA), the Uganda Medical And Dental Practitioners Council (UMDPC), the National Drug Authority (NDA), to name a few; we increased the number of CDEs, and witnessed the opening of the Dental School Clinic at Makerere University. We continued to reach the wider public through media programs and free dental camps. We are glad to report that the amended UDA constitution is in its final stage of being registered.

It takes a collective effort to make an association like ours viable, and I think it is only fair that special thanks also go out to all the volunteer members on our executive committee, for all their hard work.

While there is still much to do, especially in

addressing challenges of financing, membership recruitment and specialized training for all the dental disciplines, we are very optimistic that 2020 will usher in new and exciting opportunities. We have seen the first grandaunts of basic implantology course and hope to see more graduating next year. We sponsored our own Dr. Balidhawa Hannington to attend the FDI scientific congress in San Francisco to keep our international cooperation alive.

I want to thank each and every one of you for your support and cooperation. We need to continue to make dental services safer, more relevant and affordable to the greater public through continued best practice sharing and problem-based learning.

Regards,

Dr Ayub Twaha

President, Uganda Dental

Association





Dr. Katumba Ssentongo Gubala.

# Message from the Registrar, Uganda Medical and Dental Practitioners Council (UMDPC)

I salute all of you who are providing quality services to our population. I want to thank all the agencies that continue to invest into the profession in both infrastructure and technology so as to improve the quality of dentistry in the Country. I also thank all professionals and agencies that provide Continuous Professional Development to the fraternity. I recognise that the dental fraternity is the most efficient provider of CPD as per UMDPC records.

Within this year, UMDPC put up a platform that will enable all professionals obtain licences online. During this meeting, we shall have an opportunity to learn how this platform works. A training for all providers of Continuous Professional development will be also conducted next week to enable them interact with the platform.

I also report that this year, 2 dental schools notably Uganda Christian University and Kampala International University dental schools joined the business of producing dental surgeons. They all require our support as they progress into the clinical years that have challenges of staff, which is still deficient in the Country.

On a sad note, following an inspection conducted by the Joint EAC Partner states' Medical

and Dental Councils in July 2019 recommended that Makerere Dental department should NOT recruit any students citing inadequate infrastructure and staffing. UMDPC and other agencies are working together to ensure that Makerere complies and returns to the EAC fraternity.

UMDPC will continue to work with Uganda Dental Association (UDA) to advocate for resources for good quality of training of dental fraternity, infrastructure, staffing and availability of dental supplies are available in the Country.

UMDPC welcomes constructive ideas from all dentists for the betterment of the profession.

I again congratulate UDA for organising a successful Annual Scientific and Annual General Meeting.

Long live Dentistry

Dr Katumba Ssentongo Gubala. DDS (Dar), MPH (MUK), MBA (UCU)

Registrar, Uganda Medical and Dental Practitioners Council



# THE STATE OF MAKERERE UNIVERSITY DENTAL SCHOOL

Warm greetings to all surgeons.

ollowing the inspection and recommendation by the East African Medical and Dental Practitioner's Council to Makerere University's dental department and school under college of health sciences, Mulago. The dental school and department have undergone drastic progress in all aspects hence the birth of the new and the biggest home of dental training in the country.

On the 19 August, the new dental training hospital with state of the art operating rooms and equipment was officially opened. It is located opposite the guild offices in the eastern part of the university (main campus). This facility has 22 dental chairs, a digitalised system of radiographic machines, modern sterilizer, compressors and many more new instruments. The hospital operates under special clinics l.e orthodontics, periodontics, prosthodontics, restorative, paediatrics and oral surgery on distinct days and students are divided in two groups and work in shifts (morning or evening) under different supervisors depending on the clinic that is going on. However, the supervisor to student ratio is high.

The department provides dental materials to the students for efficient and effective training of the 21st century dental surgery students and service delivery to the patients. However, the material supply is still inadequate.

Since its opening, the facility has attracted many peo-

ple in the country to come for dental care including Makerere university staff, students and many more from the different parts of the country.

In a period of three months in existence, over 2550 cases have been treated in this hospital according to the facility records.

The school is undergoing a major expansion and refurbishment of its facilities . When completed, more dental chairs will be installed, there will be more space for lecture theatres, a dental laboratory and the intake of students will increase. Additionally, a new Masters degree programme in Restorative dentistry will be offered.

I take this privilege to thank every stakeholder in your different protocols for the support and love towards your profession and the dental training institution of Makerere university and for striving every now and then to see that dentistry moves to another standard in both practice and training in this country.

I am honoured and proud to give this message of the state of our mother school in this mighty journal. It is an exciting time for us, and i see very many great opportunities for the future of dental training and practice in Uganda.

As we build for the future
May the loving God richly bless you

KYAGABA BRUNO SERUNKUMA BSD V, MUDSA president 2019/2020



### Dental age estimation using radiographic assessment of third molar eruption among 10-20-year-old Ugandan population.

Annet Kutesa, Charles Mugisha Rwenyonyi, Catherine Lutalo Mwesigwa, Joan Kalyango.

#### **Abstract**

### Aim:

This study aimed at establishing the age for third molar eruption among Ugandans aged 10-20 years.

### **Materials and methods:**

This was a cross-sectional study comprising 471 male and 541 female patients attending Mulago Dental Clinic. Patients' orthopantomographs were assessed for third molar eruption as described by Olze et al. Age was summarized using means/SD. Jaw and sex differences were assessed using Student's t-test.

#### **Results:**

Complete eruption (Stage D) ranged between 13 and 20 years. The mean age at complete eruption for girls and boys was 17.5-18 years and 18.2-18.6 years, respectively.

Mean age was statistically significantly (P < 0.05) lower among girls compared to boys for all third molar teeth (#18, #28, #38, and #48). The difference in mean eruption times between girls and boys was -0.62 (95% confidence interval: 0.2-1.0, P = 0.006). At 18 years, 40% or 41% maxillary and 52% or 53% mandibular molars were completely erupted. There were statistically significant differences in eruption between the sexes and jaws for all teeth (P < 0.05).

### **Conclusions:**

Given the fact that the percentage of erupted third molars by age 18 was found to be <50% on an average in this Ugandan population, we should reconsider the use of third molar eruption as a definitive tool for age estimation in this population.

### Socioeconomic and nutritional factors associated with age of eruption of third molar tooth among Ugandan adolescents

Annet Kutesa, Barbara Ndagire, Grace Ssanyu Nabagala, Catherine Lutalo Mwesigwa

### **Abstract**

### Aim

This study aimed to establish the influence of socioeconomic and nutritional factors on the age of eruption of the mandibular third molar among Ugandans aged 10-20 years.

### Materials and methods:

This was a cross-sectional study carried out in a dental clinic of Mulago Hospital between January and December 2017. The background information was obtained from the participants using a questionnaire in the form of an oral interview. The anthropometric measurements were obtained using a tape measure and a weighing scale, while dental radiographs were used to determine the eruption stages of the mandibular third molar. Statistical analysis: The data were analyzed using STATA 13 and summarized using descriptive statistics

and multivariate analyses. Statistical significance was inferred at P < 0.05.

#### Results:

Participants in the overweight body mass index category were statistically significantly associated with the age of the mandibular third molar eruption (P < 0.05) compared to their normal counterparts. There was no statistically significant association between socioeconomic status and age of eruption of third molar teeth (P > 0.05). Age of eruption was statistically significantly higher among males than females (P > 0.05).

### **Conclusion:**

The findings of the present study reveal that overweight influences early eruption of the mandibular third molar tooth, although there is no trend between socioeconomic status and the age of eruption of the mandibular third molar.



## PYOGENIC INFECTIONS BY DR KITYAMUWESI RICHARD; BDS, MDENT(OMFS), AdvDipHLM

Table 5. The frequency distribution of isolates based on their susceptibility to different antibiotics (n = 68).

	Percentage susceptibilities of isolates												
	Gram negative isolates			Gram positive isolates									
Antibiotic	HI	PM	EC	CF	KP	ES	StA	StP	Stpy	VS	SE	SA	SP
Penicillin G							100	0.0	100	0.0	0.0	23.1	0.0
Augumentin	100	50.0	0.0		0.0						50.0	100	0.0
Oxacillin						0.0				0.0	50.0	88.2	0.0
Ampicillin	0.0	50.0	0.0	0.0	0.0	66.7				0.0	0.0	0.0	0.0
Erythromycin						0.0	100	100	100	75.0	75.0	88.2	
Clindamycin						0.0		100		92.9	50.0	50.0	100
Vancomycin						100				100	100	100	100
Gentamicin	0.0	100	60.0	0.0	0.0	33.3				66.7	75.0	93.8	0.0
Cotrimoxazole	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0
Ciprofloxacin	83.3	100	70.0	0.0	25.0	0.0		100		84.6	75.0	88.2	0.0
Tetracycline	40.0	0.0				33.3				0.0	50.0	29.4	100
Ceftriaxone	60.0	100	30.0		0.0			100		81.8			
Chloramphenicol	80.0	50.0	30.0		50.0	100	100	100	100	92.3	100	85.7	
Levofloxacin		100	0.0	100	100								
Amikacin		100	100	100	100								
Imipenem		100	100	100	100								
Cefuroxime		100	12.5	0.0	0.0								
Ceftazidime		50.0	20.0	0.0	0.0								
Cefotaxime		100	0.0		0.0	0.0					50.0	100	0.0
Linezolid						50.0					100	100	100
Moxifloxacin						50.0					100	100	

**Note**. VS – Viridans Streptococci Group, SA – *Staphylococcus aureus*, HI – *Hemophillus influenza*, EC – *Escherichia coli*, KP – *Klebsiella pneumonia*, SE – *Staphylococcus epidermidis*, SP – *Staphylococcus pasteuri*, ES – *Enterococcus species*, PM – *Proteus mirabilis*, StA – *Streptococcus agalactiae*, StP – *Streptococcus pneumoniae*, Stpy – *Streptococcus pyogenes*, CF – *Citrobacter freundii* (Kityamuwesi et al., 2015

### APPLYING DENTAL MATERIALS FOR CLINICAL SUC-CESS BY DR IAN MUGISA; BDS,MSD, GCSRT

### Tables showing %shrinkage of composite by type

Composite restorative	Type	Shrinkage %
Filtek LS	Nano-hybrid	0.9
Reflexions XLS	Nano-hybrid	1.5
Grandio	Nano-hybrid	1.6
Kalore	Nano-hybrid	1.8
Estelite Sigma Quick	Nano-hybrid	1.9
Heliomolar	Micro-fill	1.9
Tetric EvoCream	Nano-hybrid	1.9
Venus Diamond	Nano-hybrid	2.1
Filtek Supreme Plus	Nano-hybrid	2.4
N'Durance	Nano-hybrid	2.4
Herculite Ultra	Nano-hybrid	2.8
Esthet X HD	Nano-hybrid	2.8

Shrinkage %
3.0
3.1
3.1
3.8
4.1
4.3
4.4
4.8
6.0

The full CDE presentations from which these tables were derived can be accessed on the UDA website; www.ugadent.org



# Management of Retrograde Periimplantitis prior to Replacement of Mandibular Incisor.

Dr Billy Ashaba, Bds

### History.

30 year old Ugandan male presented 12 hours after suffering trauma to the upper and lower front teeth. He was a non-smoker with no known history of chronic illnesses. No abnormal findings detected in review of other systems.

#### **Examination**

He had grade 2 mobility of 11 and 21, and avulsed 42 for which he wanted a replacement. He had fairly good oral hygiene. All other systems were unremarkable.

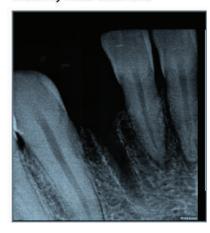
### **Initial treatment:**

- Soft tissue injuries were managed appropriately; Composite splinting was done for 11 and 21 (to last 4 weeks).
- Patient was reviewed 2 months later for pre implant assessment.

### Implant treatment planning.

PA of 42 was taken which showed bone healing occurring in its early stages.

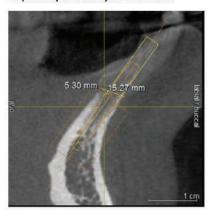
PA X-ray after 2 months



Intra oral and extra oral photographs were taken.

- Diagnostic cast and wax up were fabricated.
- Space analysis using CBCT (this led to selection of a 3.1 by 13 megagen intermezzo mini implant)

Implant space analysis with CBCT



### Implant placement

An incision was made in the midline of the buccolingual dimensions of the ridge. The incision was extended gingivally to the midline of the facial aspect of 43 and 41 with no relieving incisions. The drill sequence followed was;

### Pilot drill- 2.0 drill-2.5drill-2.8 drill

Bone grafting using hypro-oss 0.5-1.0mm particle size -natural hydroxyapaptite + atelocollagen composite for bone substitution. A platelet rich fibrin membrane prepared from the patient's blood was placed over the graft with a cover screw and closure done with 3/0 vicryl suture. Patient was discharged on oral antibiotics.

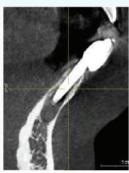
### Follow up.

A radiolucency was discovered as incidental finding on x-ray two months after implant placement and monitored. One month later, the radiolucency seemed to have increased in size on x-ray. It



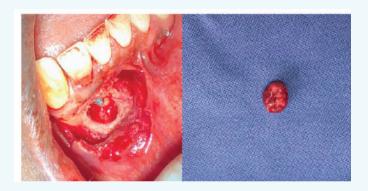
was still asymptomatic and there was no loss of implant stability. A diagnosis of dry apical peri-implantitis was made. Implant was not removed since there was no loss of implant stability. Surgery was planned to remove the lesion.





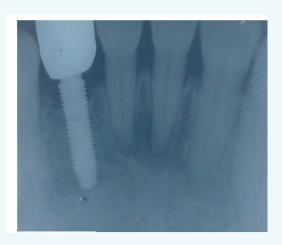
### Surgical management;

Patient was made to rinse with chlorhexidine gluconate. Submarginal incision was made in the region of mucogingival junction of 42 to ensure papilla preservation. Wide based trapezoidal flap was raised. Using sterile surgical bur with cooling current of saline, the alveolar bone over the lesion was removed and curettage done to remove the lesion. Lesion was a soft, pliable circular mass, 1cm in its widest diameter. Curettage and irrigation of the site was performed. Implant surface was treated with 30% citric Acid of pH 1 for 60 seconds. Bone grafting using Geistlish Bio-oss spongious bone substitute. Hypro-sop (atelo-collgen type 1) membrane placed over graft material and closure performed with 6/0 braided silk suture.



Review after 6 months.

There was significant bone regeneration in the apical region of the implant. Patient monitoring continues.



### References

- 1. Franck Renouard, Bo Rangert 2008, Risk Factors In Implant Dentistry; Simplified Clinical Analysis for Predictable Treatment, Second Edition, Quintessence International ISBN 978-2-912550-56-9 Pages 99-109
- 2. C. Kusum, P, Mody, D. Nooji S. Rao, B.G. Wankhade Inter--foraminal haemorrhage during anterior mandibularimplant placement: An overview.Dental Research Journal July--Aug 2015 Web. PMC4533185/PMID. 26288617
- 3. Reiser GM, Nevins M. The ImplantPeriapical lesion, etiology, prevention and treatment. Compend Contin Educ Dent. 1995;16:768--772 (PubMed) (GoogleScholar)

### Clinical supervisors

- Dr. Tom K Mutyabule
   (Dental Radiology and Implantology)
- 2. Dr. Dunstan Kalanzi(Prosthodontics)
- Dr. Muhammad Mbabali (Periodontology)

Full document of this case report can be accessed on the UDA website, www.ugadent.org



### **MAKERERE UNIVERSITY DENTAL SCHOOL**

### Pictorial





















### **TUBERCULOSIS AND THE DENTAL PROFESSION**



Have you ever tested for TB? If so, when did you last for TB? How often do you test for TB? How do you screen patients that have active TB who come for dental treatment? Do you have any measures for TB screening before employing anyone to work at your facility? Are there any anti-TB measures at your dental facility?

By: Dr. Maria Goretti Nakyony

isiting another country is always marked with a lot of excitement. You are really interested in seeing a different cultural perspective, way of life, scenery, name it. We all know that most countries have medical requirements for all foreigners of which Norway is one of them. I missed out knowing the medical requirements I needed on arrival in Bergen. Luckily enough I was in position to attend the orientation week where I got to know that students coming from certain countries had to take a tuberculosis (TB) test and a chest x-ray before getting a residence card.

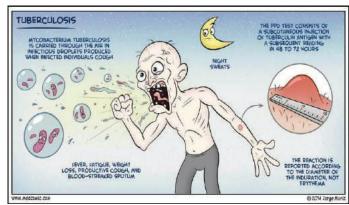
I was curious to find out if my adorable country was on this list. Alas!!! Uganda was on this list of countries having a high prevalence of Tuberculosis. I know most of you would be thinking this was an obvious thing that I needn't not to check the list. On the other hand, I had hope that Uganda could be missing on this list. Nevertheless, I went for the Interferon Gamma Release Assay (IGRA) test coupled with a chest x-ray along with other African colleagues from different countries. Relevant history was taken from each of us and to my surprise the African colleagues were told they only needed a chest x-ray and no need for the tuberculosis blood test (IGRA) since they had no risk factor in terms of exposure and had a short duration in Norway.

The fact that I was equally staying for a short while couldn't tally with why I particularly needed to take the IGRA but guess what I didn't know I had a significant

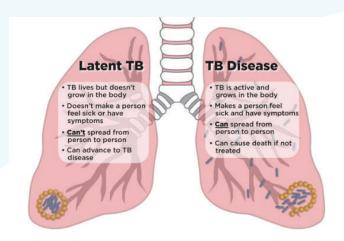
risk factor which was the **DENTAL PROFESSION!!!!** 

Tuberculosis (TB) is a serious public health concern globally, and almost half of new infections are undetected.[1] Tuberculosis is a well-recognized hazard to health care workers including dentists. Dental practitioners are at risk due to working in proximity of potentially infectious secretions.[2]

Tuberculosis is caused by inhalation of Mycobacterium tuberculosis from an infected person who coughs, sneezes, speaks or sings.[3] It is in two forms active and latent TB. Active TB involves rapid multiplication and invasion of different body parts more commonly the lungs. This is common in immunocompromised individuals like HIV infected persons, social factors including poverty, overcrowding, homelessness, and inadequate health care.[4] Symptoms include cough, phlegm, chest pain, weakness, weight loss, fever, chills and night sweats.



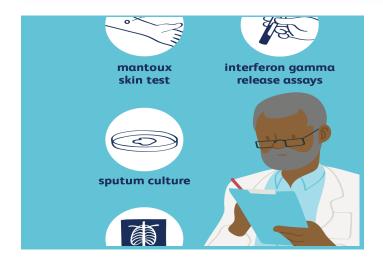




In Latent TB, there is an infection with Mycobacterium tuberculosis, but patient doesn't develop an overt disease. There are no symptoms, non-infectious[4] and the chest x-ray may appear normal. This is common in immunocompetent individuals like HIV negative individuals. The only manifestation of this encounter may be reaction to the tuberculin skin test (TST) or interferon-gamma release assay (IGRA). Latent TB is a risk factor for active disease once immunity is compromised by contracting HIV, diseases or medications that compromise the immune system. If latent TB is not treated, there is a 10% chance of developing active TB in a lifetime.[3]

### **Center of Disease Control and Prevention (CDC)**

### Guidelines for Infection control or precautions in Dental Outpatient settings[3, 5]



health care personnel (DHCP)) are educated regarding signs and symptoms of TB

When hiring DHCP, ensure that they are screened for latent TB infection and TB disease

Postpone urgent dental treatment

Environmental controls

Use airborne infection isolation room to provide urgent dental treatment to patients with suspected or confirmed infectious TB

In settings with high volume of patients with suspected or confirmed TB, use high-efficiency particulate air filters or ultraviolet germicidal irradiation

### Administrative roles

Assign responsibility for managing TB infection control program

Conduct annual risk assessment

Develop written TB infection control policies for promptly identifying and isolating patients with suspected or confirmed TB disease for medical evaluation or urgent dental treatment

Instruct patients to cover mouth when coughing and/ or wear a surgical mask

Ensure that dental health care personnel (dental

### Respiratory protection controls

Use respiratory precautions—at least an N95 filtering face piece (disposable)—for DHCP when they are providing urgent dental treatment to patients with suspected or confirmed TB

Instruct TB patients to cover mouth when coughing and to wear a surgical mask



### Dental Health Care workers' control measures

**CDC** recommends that all persons in the dental office who have the potential for exposure to *M. tuber-culosis* through air space shared with persons with infectious tuberculosis disease (which essentially means all dental personnel) be tested for infection, either by whole-blood interferon gamma release assay (IGRA), or a two-step baseline tuberculin skin test at the beginning of employment, as well having an individual TB risk assessment. It also recommends annual TB education for all health-care workers which is to include information about TB exposure risk.[6]

Unless medically contraindicated, all personnel with untreated latent TB should be treated.[6]

Workers found with a positive test, either TST or IGRA should consult with the physician if any treatment is required.[6]

The CDC and National Tuberculosis Controllers Association recommend if baseline TST or IGRA is negative, test should be repeated 8-10 weeks after exposure.[6]

History taking about previous TB episode or exposure, ask for symptoms of TB (persistent cough more than 3 weeks, fever, night sweats, unexplained weight loss, hemoptysis, chest pain etc)

### Dental Patient management



NB: Since latent TB is not infectious, patients can be treated in the dental office under standard infection control precautions.[7]

What if a patient who has come for dental treatment has TB signs and symptoms?

- Isolate the patient from other patients or staff[7]
- Instruct or offer them a surgical or procedural mask to wear[7]

- Assess for dental care urgency and promptly refer for medical care[7]
- Urgent dental care for TB suspect or one with active TB should be provided in only a facility that has the capacity for airborne infection isolation and standard measures for respiratory protection in place.
- Use fitted, disposable N-95 respirators when treating patients with active TB. Standard surgical face masks are not adequate to protect against tuberculosis transmission!!!

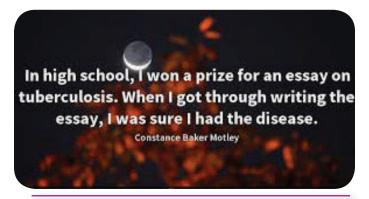


### CDC recommendation[3, 5]

Risk classification: Identify active TB cases encountered in the dental office. Low risk; fewer than 3 cases encountered annually. Medium risk; encountered more than 3 cases annually. A dental office where there is evidence of a transmission of tuberculosis within the past year or one of the staff has a confirmed diagnosis of active tuberculosis is temporarily classified as potential ongoing transmission.

**Community Awareness:** Awareness of TB risk in surrounding community

### Conclusion



**NB:** Much as the contraction or spread of TB in dental settings is still relatively low, it doesn't rule out the fact that measures should be put into place to prevent exposure. As Nelson Mandela said, "We can't fight AIDS unless we do much more to fight TB as well."

DR. MARIA GORRETTI NAKYONYI

BDS(Mak)

JUBILEE DENTAL CLINICS

Exchange student at University of Bergen, Center of International Global Health

### **Acknowledgement**

American Dental Association https://www.ada.org/en/member-center/oral-health topics/tuberculosis-overview-and-dental-treatment-considerations

#### Referances

- 1. Organization, W.H., <WHO\_2008\_global TB report.pdf>. 2008.
- Harlow, R.F. and J.S. Rutkauskas, Tuberculosis risk in the hospital dental practice. Spec Care Dentist, 1995. 15(2): p. 50-5.
- 3. Cleveland, J.L., V.A. Robison, and A.L. Panlilio, *Tuberculosis epidemiology, diagnosis and infection control recommendations for dental settings: an update on the Centers for Disease Control and Prevention guidelines.* J Am Dent Assoc, 2009. **140**(9): p. 1092-9.
- Ziganshina, L.E. and M. Eisenhut, *Tuberculosis (HIV-negative people)*.

   BMJ clinical evidence, 2011. 2011: p. 0904.
- Jensen, P.A., et al., Guidelines for preventing the transmission of Mycobacterium tuberculosis in health-care settings, 2005. MMWR Recomm Rep, 2005. 54(Rr-17): p. 1-141.
- 6. Lynn E. Sosa, M., 2; Gibril J. Njie, MPH3; Mark N. Lobato, MD2; Sapna Bamrah Morris, MD3; William Buchta, MD4,5; Megan L. Casey, MPH6; Neela D., M.M.G. Goswami, MSN7: Bobbi Jo Hurst7: Amera R. Khan, MPH3; David T. Kuhar, MD8; David M. Lewinsohn, MD, PhD9; Trini A. Mathew,, and M.R.R. MD10; Gerald H. Mazurek, MD2,11; Lisa Paulos, MPH2,12; Wendy Thanassi, MD2,13; Lorna Will, MA2; Robert Belknap, MD2,11, Tuberculosis Screening, Testing, and Treatment of U.S. Health Care

Personnel, 2019.

7. Prevention, C.o.D.C.a., Guidelines for Infection Control in Dental Health-Care Settings. 2003.



## UDA AGM AND SCIENTIFIC CONFERENCE PROGRAM 14thTH AND 15TH NOVEMBER 2019

**Theme:** Transforming Dental Education and Practice in Uganda.

**Venue**: Hotel Africana

TIME	TOPIC	SPEAKER
	FIRST DAY THURSDAY 14 <sup>TH</sup> NOVEMBER	
8.00am-8.30am	Arrival and registration	UDA Administrator
	Session Chair: Dr. Mbabali Muhammad	
8.30am-8.35am	Welcome Remarks	UDA President Dr. Ayub Twaha
8.35am-8.50am	Propofol use in Dentistry	Dr. Cornelius Ssendagire
8. 50am-9.10am	Oral Health in HIV positive pediatric patients	Dr. Cathy Mwesigwa
9.10am-9.25am	Early child hood caries	Dr. Norman Musinguzi
9.25am-9.45am	Integration of the different dental professionals into a functional Dental Society	Dr. Magara James
9.45am-9.55am	Reactions (question and answer session)	
9.55am-10.25am	Tea Break	
	Session chair: Dr. Ntulume Davis( Opening ceremony)	
10.25am-10.45am	UDA President's speech	Dr. Ayub Twaha
10.45am- 11.00am	Keynote speaker	Dr. Lakor Francis
11.00am-11.15am	Updates from Ministry of Health	Dr. Nabbanja Juliet
11.15am-11.45am	Chief Guest	Hon. Minister Janet K Museveni
11.45am-12.00pm	Molar –Incisor hypomineralisation (MIH): criteria for successful management.	Dr.Kusaasira Emmanuel
12.00pm-12.15pm	Review of bioceramic technology in endodontics	Dr. Lule Elijah
12.15pm-1.35pm	AGM - UDA report-UDA President (10mins) - Report from Joint meeting (UMA,UDA,PSU) & way forward (20mins) - UDA financial report-UDA Treasurer (10mins) - Updates from UMDPC Rep (10mins) - Updates from UMDPC Registrar and online annual practice licensing (30mins)	Dr. Ayub Twaha Dr. Ntulume Davis Dr. Nanozi Juliet B Dr. Lule Ntwatwa Dr. Katumba Ssentongo
1.35pm-1.45pm	Reactions (question and answer session)	
1.45pm-1.55pm	2 Sponsors	
1.55pm-2.50pm	Lunch Break	
	Session chair: Dr. Esther lynn Musinguzi	
2.50pm-3.15pm	Improved patient practice safety	Dr. Luigi Ragni
3.15pm-3.40pm	Sterilization and care of suction units	Dr. Luigi Ragni
3.40pm-4.05pm	Contamination and hygiene in dental practice	Dr. Luigi ragni
4.05pm-4.20pm	Applying dental materials for clinical services	Dr. Ian Mugisa
4.20pm-4.30pm	Reactions (Question and answer session)	
4.30pm-4.50pm	2 sponsors	



## UDA AGM AND SCIENTIFIC CONFERENCE PROGRAM 14thTH AND 15TH NOVEMBER 2019

	SECOND DAY FRIDAY 15TH NOVEM	BER			
8.00am-8.30am	Arrival & Registration	UDA Administrator			
	Session chair: Dr Kalanzi Dunstan				
8.30am-8.45am	Bone types and physiology consideration in implantology and periodontal defects.	Dr. Mbabali Muhammad			
8.45am-9.15am	Lab Software	Dr. Tom Mutyabule			
9.15am-9.30am	Reactions(Questions and answer session)				
9.30am-10.00am	3 sponsors				
10.00am-10.30am	Tea Break				
	Session chair: Dr. Cathy Kabenge				
10.30am-11.30am	Implantology: The past, present and future	Dr. Tom M, Dr. Mbabali M & Dr. Kalanzi Dunstan			
11.30am-11.45am	Treatment considerations for partially dentate patients	Dr. Umar kizito			
11.45am-12.00pm	Sponsor				
12.00 noon-12.15pm	Lip Repositioning	Dr. Dr. Saurabh Thawrani			
12.15pm-12.30pm	Ergonomics in dental practice	Dr. Kusasiira Emmanuel			
12.30pm-12.40pm	Reactions(Question and answer session)				
12.40pm-1.00pm	2 sponsors				
1.00pm-2.00pm	Lunch Break				
	Session chair:	Dr.lan Mugisa			
2.00pm-2.15pm	Forensic age estimation of third molar eruption	Dr. Kutesa Annet			
2.15pm-2.30pm	Pain management in general dentistry	Dr. Muwazi Louis			
2.30pm-2.45pm	Phillips Pharmaceuticals				
2.45pm-3.00pm	Jaw injuries : causes, diagnosis and management	Dr. Ayesiga Savino			
3.00pm-3.15pm	Reactions				
3.15pm-3.35pm	Updates from National Drug authority Representative	NDA Rep			
3.35pm-4.00pm	Updates from MUDSA	Student Rep			
4.00pm-4.30pm	Reactions and Closure				



# FLAP DESIGN TECHIQUES FOR DENTAL IMPLANT SURGERY.



By: Dr. Nelson Kalyesubula

flap is a section of the gingiva and/or mucosa surgically separated from underlying tissues to provide visibility and access to the bone.

A good flap should have uninterrupted blood supply i.e should have wider base than free margin, easily be apposed during closure without tension, offer an appropriate surgical field of view, should not involve bony prominences especially at the releasing sites to avoid dehiscence during healing. The incision line should be a single, neat and continuous demarcation all the way to the bone. The flap edges should rest on bone.

During the establishment of the **incision**, the following considerations should be observed; tissue should be handled gen-

tly, sharp dissection should be used to avoid tissue damage during flap elevation, careful hemostasis must be attained, tension should be avoided.

In dental implant surgery, there is no single flap design that serves as the optimal approach for every surgery and as the need for cosmetic procedures with minimally invasive techniques increases, so too does the variability in flap design for a particular implant surgery at hand.

The site of implant placement (aesthetic zone or hidden posterior zone) greatly impacts the flap design. Additionally, the ridge width is another considered factor; wide widths may provide sufficient area for one to place an implant with min-

imal/no tissue reflection, while narrow ridges may require flap reflection for better visualization and ridge width determination. Furthermore, narrow ridges may need bone augmentation and guided bone regeneration membranes, which necessitates wide flap design to cover the bone graft and membrane.

The following are the **flap design options** that can be applied in different implant surgical cases depending on the case at hand: -

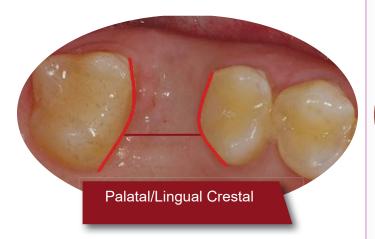
### MID-CRESTAL FLAP.

This flap is done in cases where there is sufficient buccal and lingual/palatal tissue. The incision is done in the middle of the crest and extended to the intra-sulcular aspects of the adjacent teeth. Full thickness buccal and lingual/ palatal flaps are raised/reflected to expose the site of implant placement. This is one of the most routinely applied flap design in implant surgery. Mid-crestal incisions create the most predictable primary soft tissue healing and less chances of bone loss around implants (cranin et al). This design can be used in one stage or two stage procedure where simultaneous grafting is to be done or can be done in cases for grafting alone.



### PALATAL/LINGUAL CREST FLAP.

The incision is similar to mid-crestal incision but placed towards lingual/palatal side of the crest and the flap is raised/reflected in similar way as the mid-crestal flap. This design is mostly used in cases where there is insufficient/less buccal tissue. This design may be applied in cases of simultaneous contour grafting as well as in cases of one stage or two stage approach.



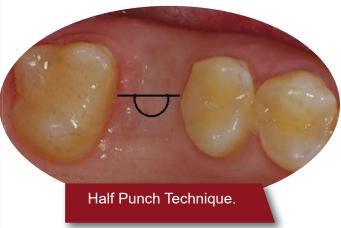
### PUNCH TECHNIQUE.

This approach only applies where tissue quality is good. The minimum soft tissue thickness required in this flap design is 2-3 mm of attached and keratinized gingiva. The punch defect is created through the gingiva using a tissue punch tool or tissue punch drill. This approach is less invasive and thus less morbidity.



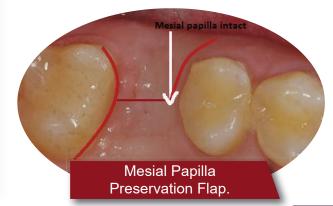
### HALF PUNCH TECHNIQUE.

This design is applied where buccal tissue is not sufficient. This is done by creating a mid-crestal incision and full thickness flap is reflected. Then the tissue punch is done on lingual/palatal aspect of incision line at the intended exact implant placement. This flap design is used mostly in cases of one stage procedure with possible simultaneous grafting.



## MESIAL PAPILLA PRESERVATION FLAP.

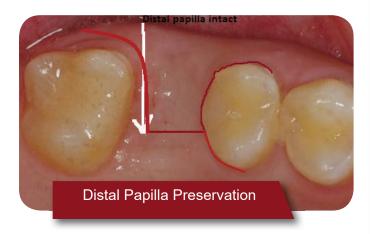
This applies for aesthetic cases where there is need to preserve the mesial papilla to maintain the aesthetics. A mid-crestal incision is done and connected to both the intra-sulcular incision on the distal tooth and to the vertical releasing submarginal incision that preserves the mesial papilla.





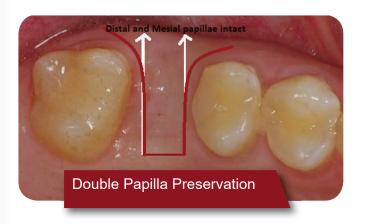
### DISTAL PAPILLA PRESERVATION FLAP.

This is the reverse of the mesial papilla preservation flap design. This design is used in cases where there is need to preserve distal papilla which is needed to allow preparatory bone grafting procedure. This design is used in preparatory bone grafting and not for aesthetics.



### DOUBLE PAPILLA PRESER-VATION FLAP.

This is used to preserve both mesial and distal papillae. Two vertical releasing incisions are made and connected by a lingual/palatal crestal incision, then the flap is reflected towards the buccal aspect. This design is commonly applied in anterior aesthetic zone cases. This design offers superior visibility and accessibility to the surgical field.



### **CONCLUSION:**

Different implant surgical cases may require different flap design techniques. The flap design for a different case is determined by several factors which may include aesthetic requirements, amount of soft tissue present, amount of bone/bone volume present, need for bone or soft tissue augmentation and also the number of implants to be placed at the surgical site. Thence, the surgeon must be thoughtful and creative in selection of flap design that best suits and serves purposeful/ successful treatment out comes.

Author:

**NELSON PETER KALYESUBULA** 

**DENTAL SURGEON** 

BDS-Mak

JUBILEE DENTAL CLINICS.



# LIP REPOSITIONING: SECRET TO MAGNIFICENT SMILE





By: Dr. Saurabh Thawrani

### Background.

Excessive gingival display can be managed by a variety of treatment modalities, depending on the specific diagnosis. Lip repositioning surgery is a largely unknown and underutilized treatment modality for excessive gingival display. It involves precise resection of maxillary mucosal tissues with reattachment of the lip in a more coronal position. This limits lip elevation on smiling and increases lip fullness.

### Indications:

- 1. Excessive gingival display that is non-skeletal in origin
- 2. Up to 6 to 7 mm of excessive gingival display

#### Contraindications:

- 1. Same as for any periodontal surgery
- 2. Inadequate attached gingiva in the maxillary anterior sextant
- 3. Severe vertical maxillary excess

### Procedure:

A total of two patients with gummy smile were selected for the study. Lip Repositioning procedure works by limiting the retraction of the elevator smile muscles. This is accomplished by removing a strip of mucosa from the maxillary buccal vestibule, then suturing the lip mucosa to the mucogingival line. This results in a narrower vestibule and restricted muscle pull, thereby reducing gingival display during smiling.



### Result:

After a 3-month follow-up, significant improvement in the amount of gingival exposure and esthetic satisfaction was observed in both cases.

### **Conclusion:**

The Lip repositioning technique to decrease the amount of gingival display was shown to be more conservative and provided good esthetic outcomes in a 3-month follow-up.

### PRE-OPERATIVE PICTURE

### LIP REPOSITIONING



Pre- Operative Gingival Display



Removal of Mucosal Strip



Pre- Operative Frontal View



Incision & Partial Thickness Flap Reflection



Sutures

### **POST-OPERATIVE PICTURE**



Post- Operative Gingival Display



Pre- Operative Frontal View



Post- Operative Frontal View

The full CDE presentation from which this article was derived can be accessed on the UDA website, *www.ugadent.org* 



# "SINUS AUGMENTATION: EMERGING PERSPECTIVES"



### **Abstract**

### Aim:

The present study was undertaken to evaluate the effectiveness of maxillary sinus augmentation using lateral approach with simultaneously placed two stage implant.

### Method and Materials:

Sinus augmentation procedure was performed in 14 patients using decalcified freeze dried bone allograft (DFDBA) block with simultaneous placement of one implant in each patient using piezosurgical device. Radiographic evaluations using OPG and DVT Scan were performed pre-operatively, after implant placement and at 6 months post-operatively. Clinical parameters recorded around implant were plaque index, bleeding index, probing measurement and Clinical implant mobility at 6 months postoperatively and 3 months after final prosthesis.

### **Results:**

No complications were observed during the 9 months follow-up period. The mean pre-operative residual bone height was 7.096±2.11mm. At 6 months the mean post-operative bone height was 16.58±1.61 mm with a range of 13.02mm to 18.56mm resulting in mean gain of bone height of 9.60±2.35 (0.000,S) with a range of 4.20mm to 12.97mm. The measurement of the crestal bone levels indicated minimum bone loss during observation period with no episodes of peri-mucositis or peri-implantitis.

### **Conclusion:**

Sinus augmentation using decalcified freeze dried bone allograft (DFDBA) block as a space filler was found to be an effective and safe procedure allowing high survival rates of implants placed in the posterior maxilla.



# **Dental Education Perspective: Challenges and Solutions for Training the Future Dentist**



By: Dr. Tefula F. Kwagala

here are roughly 300 registered dentists in Uganda today, according to statistics from the Uganda dental association. Most of these are employed in private practices with only a small proportion dedicated solely to public service through government health facilities. Unfortunately, more than 60 % of these dentists are located in urbanized areas of Kampala, Entebbe Mukono and Jinja. For a country with a population exceeding 40 million, and with a greater percentage of these living within rural areas, this spells an appalling situation for the country. According to the WHO, (1)the dentist patient ratio is 1:150000 in Africa, while in developed coun-

tries, it averages 1:2000. Uganda doesn't skew too far from the African figure, which is a very poor indicator of matters. This ratio supposedly goes much higher when applied to rural areas only. This is a vivid description of a country in the midst of an oral health crisis. On the surface, numbers are the problem and therefore, the solution should lie within the same; increase the numbers of dentists and do away with the problem. Unfortunately, the solution is not that straight forward as this approach also brings with it its own challenges. In 1962, Uganda had 10 oral health workers serving the whole population (2). All of these were foreign trained dentists. There



was obvious need for more dental professionals, and in 1972, the school for Public Heath Dental Officers (PHDOs) was established at mulago to cater for 25 students (3). In 1982, there was only one institution training dental surgeons in Uganda that was Makerere University. In 1987, the first dental surgeons graduated from Makerere (3). Since then, multiple institutions have sprouted all around the country, training both dental surgeons and phdos. There are about 4 PHDO training institutions (4) and 3 or 4 dental surgery training institutions. KIU, one of the newly accredited universities was licensed to train 50 dental students per year (5). Enthusiastically speaking, in the next 10 years, they would have added 250 more dental surgeons to the existing workforce. But it's not only KIU whose numbers are skyrocketing; In 2008, Makerere university dental school averaged a mere 15 students per year, 11 years later, the average class size has more than doubled...to 35. While, on the surface, this may seem like a solution in motion, it actually isn't as smooth as it appears. The cost of training a dental surgeon is titanic, and this pertains to more than the amounts paid in tuition which ranges from 17.4 million for nationals to 23.4 million for foreigners in Makerere University, one of the few public universities around. It is expected to cost more in private universities. Additionally, on the student's side, there is the necessity to purchase much of the paraphernalia that characterizes dental education. It is to a certain extent understandable that setting up a dental training institution is a costly venture. Further difficulty lies in the area of staffing. In July 2019, the east African council closed down the muk dental school. One of the grounds for closure was failure to comply with the recommended lecturer: student ratio of 1:4 (6). For a course that has been around since 1980, it would fit to reason that there would be enough people to train others. Again, this isn't the case. This can be attributed to out migration of trained dentists, death, and involvement in other economic activities not related to oral

health provision (2). Secondly and quite significantly, the number of specialists in dentistry is alarmingly low. This is best attributed to prohibitive prices associated with pursuing a master's degree abroad. Currently, Uganda offers Oral and Maxillofacial Surgery (OMFS) as the only post graduate course available for dentistry. This means that anyone who would be interested in studying anything else would have to be ready to foot the exorbitant bills that accompany it. The university of Nairobi is the closest and perhaps least costly nation for postgraduate studies with the courses costing on average 24200 dollars, give or take a few thousand dollars for a three year post graduate degree (7). So as the number of dental training institutions increases, we as a fraternity are forced to deal with the challenge of how to ensure that we have enough qualified teachers to do the job. So, what can be done to ensure that the future of dental services is safer than it is now? It is important first of all to clearly identify the stakeholders in this matter. First and foremost, the government of Uganda (MOH), the UDA, the various dental schools in their parent universities. In the absence of a collaborative strategy, it will be impossible to realize any substantial gains. Collaborative would require that the effort of one be ratified by another. Collaborative would require increased budgetary allocation to the oral health sector. The financial year 2019/2020 will see the budgetary allocation to the health sector increased from 2.3 trillion to 2.6 trillion UGX. How much of this is directed towards oral health care offers great potential for improvement. With increased funding channeled towards the oral health field; it would be possible to:

Offer sponsorship packages to eligible candidates every year to boost the number of specialists in the country.

Increase financial support to dental schools around the country to lessen the burden of students to finance themselves as well as increase the availability of state of the art training facilities.



Beyond government intervention, other stake holders do have a great role to play in the collaborative effort to improve dental education for the future for example through well calibrated and homogenous advocacy by the UDA and other high ranking dental assets in the country; a move that should be aimed at lobbying more attention and support from the government to suit our cause. Furthermore, lobbying can and should extend beyond the limited coffers of the government. Together with the different university heads and departmental heads of dentistry, opportunities from international associations and grant giving institutions can be sought out and channeled to serve prospective students who would in turn be future champions of dentistry, spearheading a brighter generation. This would call for the creation of strong inter university collaborative efforts across borders: efforts that transcend geographical areas or individual career aspirations; efforts that suit the greater good. One of the most plausible directions to follow here would be the promotion of research in dentistry, both at the University level and among professionals. In such an ideal setting, the concepts of harmonized student and lecturer exchange programs would thrive greatly, all to the benefit of the future of dentistry.

In conclusion, we are still lagging behind as far as accessibility of oral health services to all Ugandans is concerned. In order to achieve any goals that far, we need to ensure that the process through which we generate dentists is secure and reliable enough.

> Dr Tefula. T. Kwagala BDS MAK EDITOR, UDA JOURNAL 2019

### **Bibliography**

- 1. World Health Organization. Oral Health Services. [Online] 2019. www.who.int/oral health/action/services.
- 2. Muhirwe, Lorna Barungi. Reforming the Oral Health Sector in Uganda: A Primary Health Care approach. Kampala: s.n., 2003.
- 3. Ministry of Health. NATIONAL ORAL HEALTH POLICY. Kampala: Ministry of Health, 2007.
- 4. Allied Health Professionals Council Uganda. AHPC recognized training institutions 2019. [Online] 2019. https://www.ahpc.ug/schools.php.
- 5. Okello, george. BREAKING EXCLU-SIVE: EAC Medical Council orders closure of Makerere Dental School over poor standards. PML Daily. [Online] July 08, 2019. http://www.pmldaily.com/news/2019/07/breaking-exclusive-eac-medical-council-orders-closure-of-makerere-dental-school-over-poor-standards.html.
- 6. Natukunda, Carol. Makerere University's dental school on the spot. New Vision; Ugandas leading daily. [Online] July 6th, 2019. https://www.newvision.co.ug/new\_vision/news/1503030/makerere-university-dental-school-spot.
- 7. University of Nairobi. Listing of Programmes offered in UoN. University of Nairobi. [Online] 2018. https://www.uonbi.ac.ke/index.php?q=uon\_programmes\_type/Masters.



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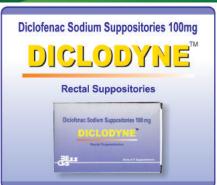
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Pictorial

























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### **AGM Partners 2019**





























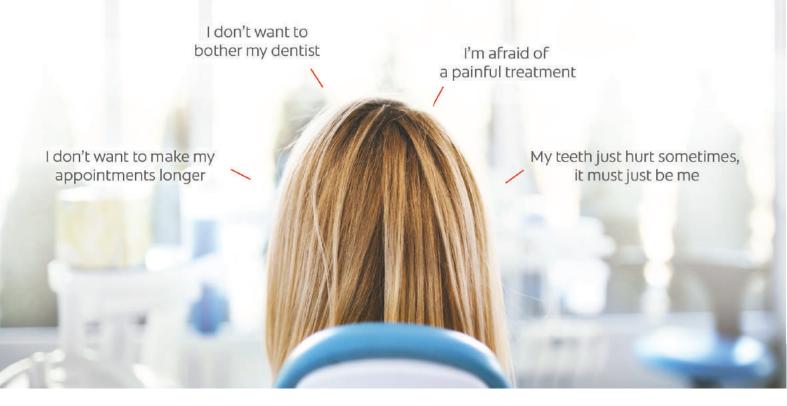




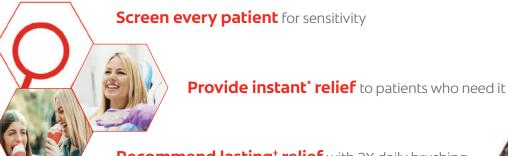


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References: 1. Colgate-Palmolive. Market research through Zapera.



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