



# SLDA News

SRI LANKA DENTAL ASSOCIATION

275/75, Prof. Stanley Wijesundara Mw., Colombo 7, Sri Lanka.

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SLDA/2021/2022/09/03 | Monthly News Bulletin | September 2021 - For circulation among SLDA members

## SLDA JOIN FORCES WITH FDI AND OTHER 64 ORGANIZATIONS TO RESPOND WHO'S DRAFT STRATEGY ON ORAL HEALTH



In response to the public consultation for the World Health Organization's (WHO) draft Global strategy on tackling oral diseases, SLDA joined forces with FDI World Dental Federation and other 64 organizations to submit a joint response at the recently concluded FDI World Dental Congress held virtually from Sydney.

The current strategy's vision fully aligns with FDI's Vision 2030, and it also refers to the three elements of universal health coverage (UHC) - quality, equitable access, and financial protection - in the context of oral health promotion and oral healthcare.

While commending this initial draft, FDI and co-signatories urge WHO to develop a Global strategy that is robust, time-bound, and implementation-oriented encompassing more ambitiously all the different areas that require reform in national health systems for oral health to become an integral element of UHC and noncommunicable (NCD) strategies.

The Global strategy would benefit from a more comprehensive description of all the implications that the associations between oral health, NCDs, and general health have for health systems. The importance of optimizing the oral health workforce to achieve the vision and goal of this Global strategy calls for a specific strategic objective on Oral Health Workforce. Sustainability should also be included as a guiding principle given the implications it has across the different strategic objectives of this Global strategy, and the responsibility that WHO and Member States have towards promoting and implementing a sustainable oral health response.

The resolution on oral health was adopted at WHO's 74<sup>th</sup> World Health Assembly on the 31<sup>st</sup> May 2021, which was proposed by Sri Lanka and supported by 40 WHO member states.

In addition, a number of important guidance documents were incorporated in the FDI general assembly this year such as the NDA pledge on Antibiotic Resistance in Dentistry, Phasing down of Dental Amalgam, Infection control in the dental office etc. These addressed timely issues facing the dentist in a global context.

Read the full Submission: <https://tinyurl.com/SLDA-News-Downloads>

## CALL FOR ABSTRACTS - ASIA PACIFIC DENTAL CONGRESS - PAKISTAN

Pakistan Dental Association (PDA), organizers of APDC 2022 are calling for Abstracts with profiles and Photographs from interested members of SLDA, for the virtual congress to be held from Pakistan in May 18 - 22, 2022.

SLDA members who wish to submit abstracts are kindly requested to communicate with SLDA office through email – [contact@slda.lk](mailto:contact@slda.lk) as early as possible.

## REFRESHER/GAP FILLING COURSE FOR DENTAL SURGERY NURSE ASSISTANTS (3RD PHASE)

The closing date for the applications for the above course, which is coordinated by Private Health Services Regulatory Commission (PHSRC) and SLDA, and conducted by National Apprentice and Industrial Training Authority (NAITA), has been extended till 25<sup>th</sup> October 2021.

More Details: <https://tinyurl.com/SLDA-News-Downloads>

# SLDA - CDA CONTINUING EDUCATION PROGRAMME

Another Virtual Clinical Meeting will be held on this Friday, 8<sup>th</sup> of October 2021 on 'Role of Dental Professionals on management of Oral Cancer' by Dr. Dilan Fernando, Consultant OMF Surgeon, District General Hospital - Ampara.

SLDA - CDA CEP is organized by the Committee of Continuing Education, Publications and Web Development of SLDA together with the Commonwealth Dental Association and moderated by Dr Sirimevan Samarakoon, Chairperson of the Committee.

Zoom Link: <https://tinyurl.com/SLDA-CDA> Meeting ID: 627 4386 9476

**SLDA & CDA | Continuing Education Programme**

# CLINICAL MEETING



## Role of Dental Professionals On management of Oral Cancer

**2021**  
**October 08**  
20.00 IST / 14.30 GMT

Dr. Dilan Fernando  
Consultant OMF Surgeon  
District General Hospital  
Ampara  
Sri Lanka



Sri Lanka  
Dental Association



Commonwealth  
Dental Association



Scan QR code to connect  
**Meeting ID**  
**627 4386 9476**  
Zoom link  
<https://tinyurl.com/SLDA-CDA>



End of the month clinical meeting on '**Management of the partially edentulous mouth**' was held on the last Sunday of September.

The resource person was Dr George Cherukara, Senior Lecturer and Consultant in Restorative Dentistry, Dental School of University of Aberdeen, UK. SLDA wishes to express sincere gratitude to Commonwealth Dental Association and the President of CDA Prof. D Y D Samarawickrama, for co-ordination and cooperation extended in this regard.

## EVENTS

### DICE - DENTAL INTERNATIONAL CONGRESS AND EXHIBITION



For information & Registration: <https://www.dice-dental.asia/>

A NOTICE FROM COLLEGE OF DENTISTRY AND STOMATOLOGY

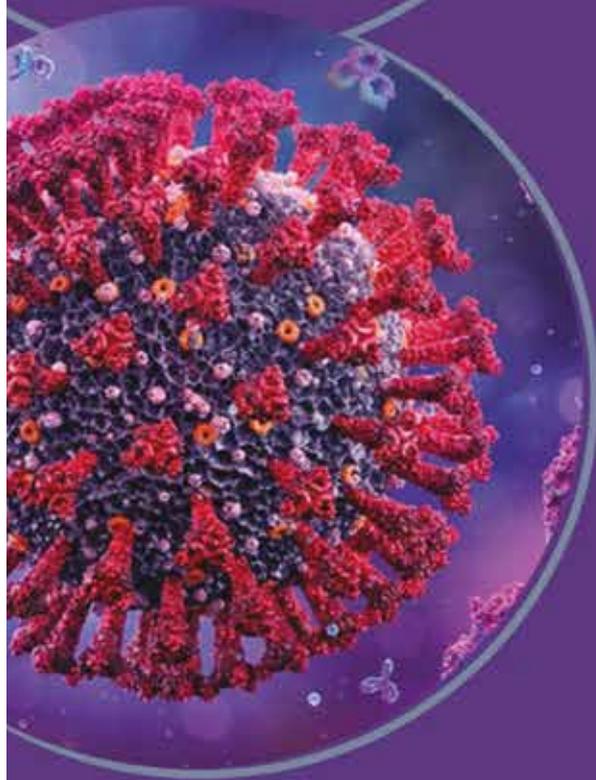
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Register today for Webinar on;

Living with

COVID -19



**COVID WAY FORWARD**

Dr. Harendra Cooray,  
Emergency Physician, ETU,  
Neurotrauma Unit, NHSL

**FACTS VS FICTIONS -  
BREAKING DOWN COVID-19  
MYTHS**

Dr. T. Prashanth,  
Emergency Physician,  
Base Hospital, Panadura

**Saturday, 09th October 2021**

**8.00PM - 9.00PM**

**<https://learn.zoom.us/meeting/register/u5MuduquqDsrHNeV7q-0uXWYvMIN33vz0bAq>**

The link for Registration: <https://learn.zoom.us/meeting/register/u5MuduquqDsrHNeV7q-0uXWYvMIN33vz0bAq>

## SLDA MEMBERS CONTACT DETAILS UPDATE

The following link can be used to send data to update your contact details at SLDA database.

<https://tinyurl.com/SLDA-Contact-Update>

Members also can text SLMC Reg. No, Email and Name to 076 563 9899 to update your contact details.

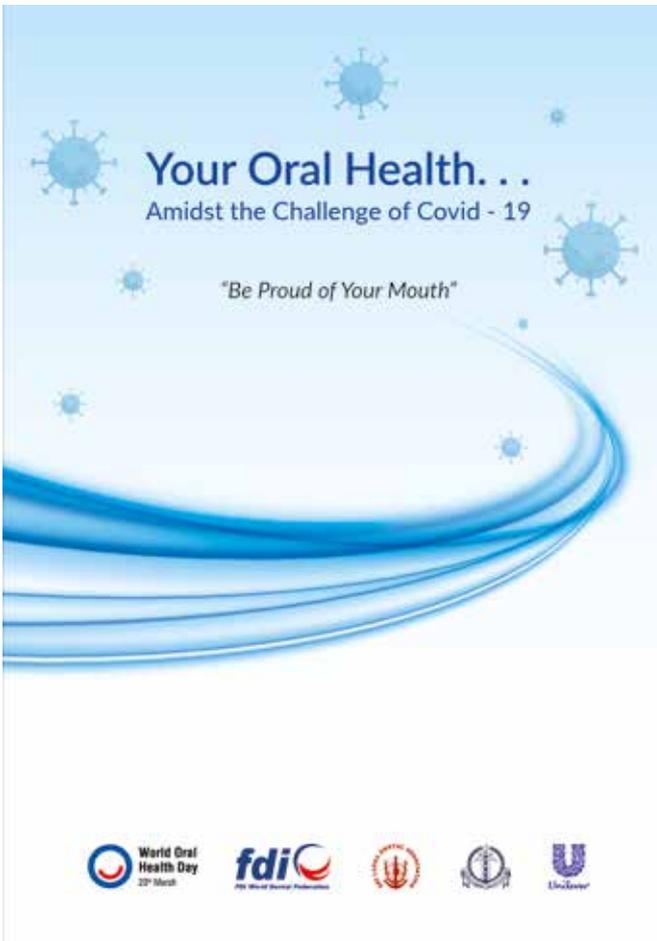
## SLDA MEMBERSHIP APPLICATION FORM

SLDA membership application can be downloaded from the below link for new members.

<https://tinyurl.com/SLDA-Membership-Application>

## FOR FURTHER REFERENCE

### ORAL HEALTH BOOKLET - YOUR ORAL HEALTH... AMIDST THE CHALLENGE OF COVID - 19



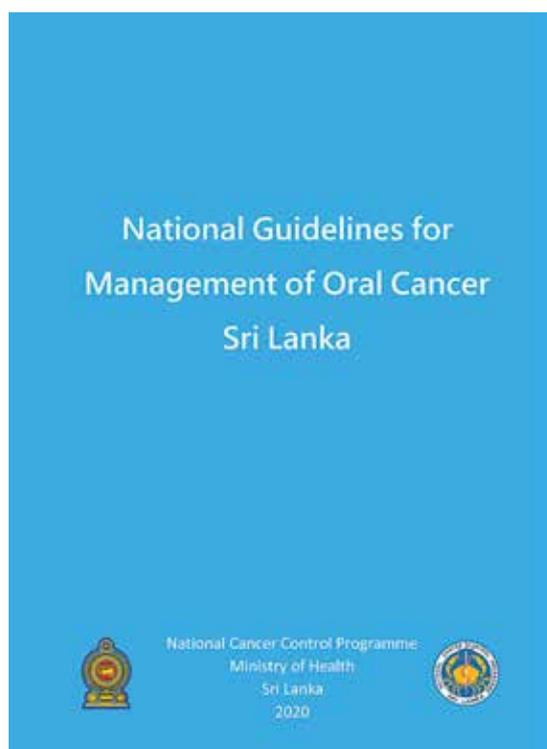
To mark the World Oral Health Day this year, Sri Lanka Dental Association together with the College of Community Dentistry of Sri Lanka published an oral health booklet in Sinhala, Tamil and English Languages, which can be used by Dental Surgeons and School Dental Therapists to raise public awareness regarding oral healthcare during Covid 19 pandemic.

#### **Download:**

<https://tinyurl.com/SLDA-News-Downloads>

# NATIONAL GUIDELINES FOR MANAGEMENT OF ORAL CANCER SRI LANKA

## Published By National Cancer Control Programme



**Download:** <https://tinyurl.com/SLDA-News-Downloads>

## UPCOMING EVENTS



Date	Event	More Information
13-14 Oct 2021	Organization of Professional Associations - 34 <sup>th</sup> Annual Scientific Sessions	<a href="http://www.opasrilanka.org">www.opasrilanka.org</a>
03-06 Nov 2021	DenTech China 2021 (Exhibition & Symposium)	<a href="https://en.dentech.com.cn">https://en.dentech.com.cn</a>
01-03 Feb 2022	AEEDC - International Dental Conference & Dental Exhibition - Dubai	<a href="https://aeedc.com/">https://aeedc.com/</a>
22-23 Jan 2022	Annual scientific Sessions of the Nutrition Society of Sri Lanka 2022	<a href="http://nutritionsofryofsrilanka.org/">http://nutritionsofryofsrilanka.org/</a> Registration: <a href="https://forms.gle/KWHBdrX5Gjp1XJBt8">https://forms.gle/KWHBdrX5Gjp1XJBt8</a>
18-22 May 2022	Asia Pacific Dental Congress - 2022	Pakistan
29 Sept - 02 Oct 2022	FDI World Dental Congress - 2022	Mumbai, India

**Dr Chandima Weerasinghe**  
Hony. General Secretary  
Sri Lanka Dental Association



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# Mucormycosis (Black fungus) of the maxillary sinus: a case report

## Abstract:

Mucormycosis, also known as black fungus, is a rare but dangerous infection. Mucormycetes are the causative molds and often affects lungs, sinus, skin and brain. Mold spores could be either inhaled or come into contact with by soil, rotting produce or bread, or compost piles. However, individuals with weakened immune system are more likely to develop the clinical disease than healthy people. Early detection, adequate surgical debridement, profound antifungal therapy and management of predisposing factors are essential in achieving desired clinical outcome. Intra venous high doses of Amphotericin B is the drug of choice, despite potential liver toxicity. This case depicts a rare presentation of maxillary sinus mucormycosis of young female with diabetes mellitus.

## Introduction

Mucormycosis is ubiquitously found in soil and on decaying vegetation. It has a rapidly growing capacity and release numerous spores that become airborne and gain access to the human body via inhalation or ingestion (1). Given its omnipresent nature, higher rate of exposure is expected in regular basis; however, it rarely leads to infect an immunocompetent individuals as intact immune system usually phagocytize the entire spores (2). However, germination and hyphae formation are common among immunocompromised patients cause infections such as; orbitorhinocerebral infection, pulmonary, gastrointestinal, cutaneous, renal and isolated central nervous infections (3). Disease may be associated with uncontrolled Diabetes, HIV or AIDS, cancer, Organ transplant, stem cell transplant, neutropenia, long-term steroid use, injected drug use,

hemochromatosis, poor nutrition and metabolic acidosis (4). Common symptoms include fever, headache, nasal stuffiness and purulent discharge and sinusitis. A high index of clinical suspicion is essential for mucormycosis as well as rapid surgical and medical intervention play a crucial role in the treatment of patients with maxillary mucormycosis and are important for recovery of patients from such a lethal infection [5].

## Case report

A 26-year-old female patient came to the Oral & Maxillo-facial unit of National Dental Hospital with a chief complaint of left side facial pain and swelling for last month following tooth extraction. Her medical history revealed that she had uncontrolled diabetes for last few months with glycosylated haemoglobin level (HbA1C), 11% (Therapeutic goal for glycaemic control < 7%) and she was on oral hypoglycaemic drugs.

On extra oral examination, there was a mild diffuse swelling over the left middle third of the face which was extending medio-laterally from the lateral aspect of nose to the outer canthus of the eye and superio-inferiorly from the infraorbital region into few millimeters above the corner of the mouth, respectively (**Figure 1**). On palpation, the swelling was soft in consistency, tender with no local rise of temperature. Eye movements were normal, and pupils were reactive. Neither paraesthesia nor circumorbital edema over the left eye was noted. The facial expressions were normal. Intraoral examination revealed, missing upper left 6 tooth with denuded oral mucosa and bluish diffuse swelling over buccal mucosa in relation to upper left 5-7 teeth region (**Figure 2**).

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Based on the history and clinical findings, a provisional diagnosis of maxillary sinus malignancy or deep fungal infection were arrived. Paranasal sinus view (PNS) radiograph showed haziness of the left maxillary sinus with destruction of the sinus wall (Figure 3).

Explorative incisional biopsy was performed from alveolar region into the left maxillary sinus, and microscopic examination under Haematoxylin & Eosin (H&E) revealed inflamed maxillary sinus mucosa and necrotic bone interspersed with fungal hyphae (Figure 4). Occasional granulomata were seen elsewhere (Figure 5). These fungal hyphae were broad, non-septate

and showed branching at right angles. Special staining with periodic acid-Schiff and Grocott stains were done which showed numerous magenta pink-coloured and black fungal hyphae respectively (Figures 6,7) which are non-septate showing branching at 90 degrees. Part of the incisional biopsy specimen was sent for medical research institute for fungal culture and Rhizopus type fungal growth was revealed under optimal conditions. Based on radiological, histological and mycological findings, a final diagnosis of mucormycosis of the maxilla was given. The patient was referred to physician to initiate intra venous Amphotericin B for further management of the patient.



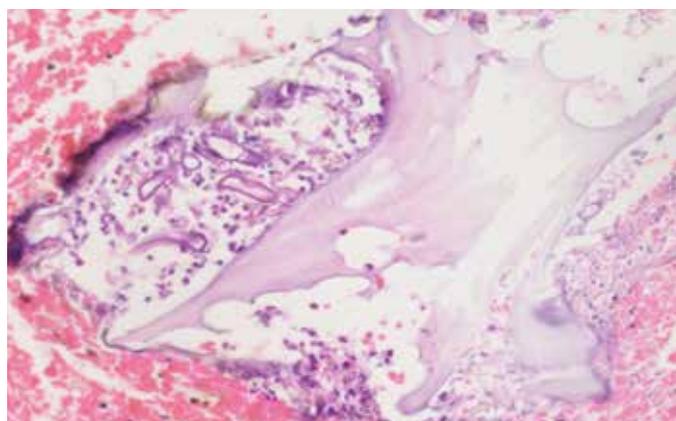
**Figure 1:** Extra oral pre-operative view



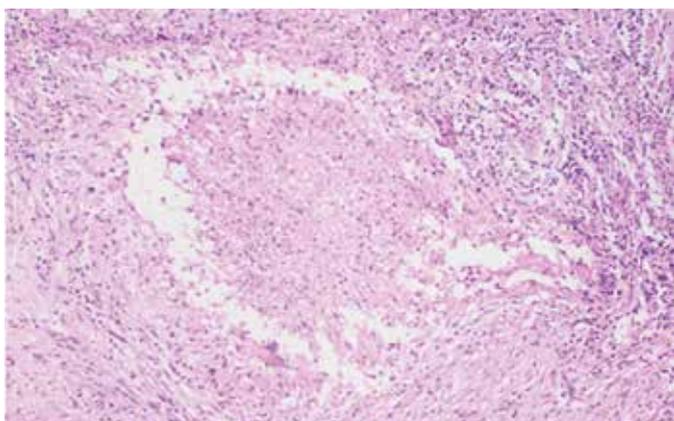
**Figure 2:** Intra oral Intra operative view



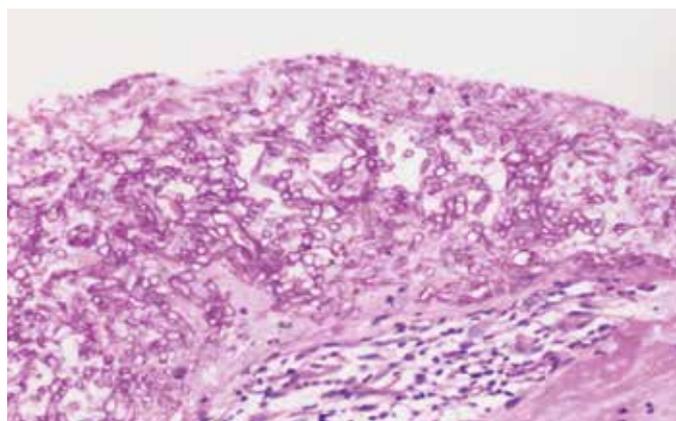
**Figure 3:** Paranasal sinus view



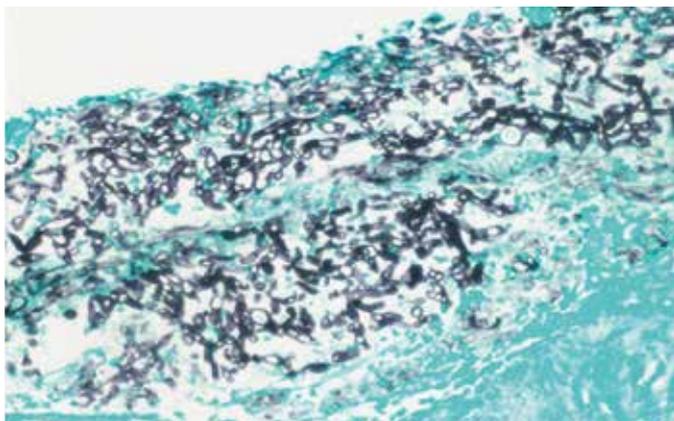
**Figure 4:** Fungal hyphae interspersed with necrotic bone (X40)



**Figure 5:** Granuloma (X40)



**Figure 6:** Fungal hyphae (x40) PAS stain



**Figure 7:** Fungal hyphae (X40) Grocott stain

### Discussion

Mucormycosis is a dangerous and infrequently invasive fungal infection and one of the most aggressive and lethal invasive mycoses (6). Current patient was presented with invasive deep fungal infection with prominent bone invasion. Usually mucormycosis occurs as a pulmonary, gastro-intestinal, rhino-cerebral or as disseminated form (7). In our patient, infection was only localized to left side maxilla. Mucormycosis is usually aggressive and potentially lethal in diabetic patient because of impaired immune system (8). Although this patient was diabetes but did not develop ketoacidosis which prevent the progression of disseminated form. Therefore, in this case the patient had a localized rhino-maxillary form of the disease which is a sub division of well documented rhino-cerebral mucormycosis (9,10).

In the early stages of the disease, patients exhibit facial cellulitis, anaesthesia, nasal discharge, necrotic turbinates, fever, headache and lethargy. In contrast, many of these symptoms were absent and only present with left side facial swelling and pain (11).

Among the clinical differential diagnosis, squamous cell carcinoma of maxillary sinus was arrived at the top of the list. Such cases usually present with ulcer with indurated margins and exposing the underlying bone. The current patient was presented with swelling and softened underlying bone. A malignant salivary gland tumour arising from the accessory glands of the palate can also be considered in the differential diagnosis.

There is a close histopathological resemblance between mucormycosis and aspergillosis. Microscopically, aspergillosis has septate branching hyphae, which can be distinguished from mucormycotic hyphae by a smaller width and prominent acute angulations of branching hyphae (8,12). In this case, the fungus was identified by haematoxylin and eosin stains and confirmed by Periodic Acid Schiff and Grocott's silver

methenamine special staining techniques.

Two principles in the patient management were followed. Firstly, control of diabetes for the patient was advised insulin therapy and dietary restrictions. Then intravenous Amphotericin B was initiated as it is the drug of choice in treatment of mucormycotic infections.

### Conclusion

The current report emphasizes the importance of having a high level of suspicion when dealing with young patients with diabetes mellitus presenting with maxillary swelling. Proper radiological assessment followed by explorative biopsy aids the accurate diagnosis. Prompt antifungal therapy (Amphotericin B) is always essential along with surgical debridement and medical management which otherwise could have ended up with a grave outcome.

### References:

1. Mucormycosis of the Frontal Sinus: A Rare Case Report and Review Nanda Kishore Sahoo, Vishal Kulkarni,1 Amit K. Bhandari,1 and Arun Kumar2 *Ann Maxillofac Surg.* 2017 Jan-Jun; 7(1): 120–1231
2. Kronish JW, Johnson TE, Gilberg SM, Corrent GF, McLeish WM, Scott KR. Orbital infections in patients with human immunodeficiency virus infection. *Ophthalmology.* 1996;103:1483–92
3. Ferry AP, Abedi S. Diagnosis and management of rhino-orbitocerebral mucormycosis (phycomycosis). A report of 16 personally observed cases. *Ophthalmology.* 1983;90:1096–104
4. Mucormycosis: What to Know By Shishira Sreenivas
5. Medically Reviewed by Neha Pathak, MD on May 10, 2021 Roden MM, Zaoutis TE, Buchanan WL, Knudsen TA, Sarkisova TA, Schaufele RL, et al. Epidemiology and outcome of zygomycosis: a review of 929 reported cases. *Clin Infect Dis* 2005; 41:634
6. Kauffman CA, Malani AN. Zygomycosis: an emerging fungal infection with new options for management. *Curr Infect Dis Rep* 2007; 9:435
7. Gonzalez CE, Rinaldi MG, Sugar AM. Zygomycosis. *Infect Dis Clin North Am* 2002; 16:895–914
8. Tugsel Z, Sezer B, Akalin T. Facial swelling and palatal ulceration in a diabetic patient. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2004;98:630-6
9. Greenberg MS, Glick M eds. *Burket's Oral Medicine Diagnosis and treatment.* India: Elsevier; 2003.p.79
10. Hazarika P, Ravikumar V, Nayak RG, Rao PS, Shivananda PG. Rhinocerebral mycosis. *Ear Nose Throat J* 1984;63:464-8
11. Buhl MR, Joseph TP, Snelling BE, Buhl L. Temporofacial zygomycosis in a pregnant woman. *Infection* 1992; 20:230-2
12. Martin S Greenberg. Ulcerative vesicular and bullous lesions. In: Greenberg MS, Glick M eds. *Burket's Oral Medicine Diagnosis and treatment.* India: Elsevier; 2003.p.79