Pan Arab Rhinology Society
PARS Reader's Digest

Reader Digest

Digested by Dr. Tarek Kandil, MD. Consultant, students Hospital, Cairo University

Introduction

This newsletter is intended to provide information that is useful to the student and specialist in the field of rhinology and allergic disorders.

The selected recent material represents important fundamental knowledge, current trends or recent developments in this field.

We hope that this newsletter will help the reader have a greater understanding of rhinology and allergic disorders

1. Safe practice guidance: a review for otorhinolaryngologists during COVID-19 pandemic and after reopen process

Reda Kamel , Ahmed Ragab , Hossam Abdelghaffar , Ashraf Kaled , Ahmed Elfarouk Abdel Fattah1 , Mahmoud Abdelaziz , Balegh Hamdy Abdelhak , Nazik Abdullah , Rashid Al-Abri , Mohammad AlFalas, Sufian Alnawaiseh, Mohammad Aloulah, Hiba Al-Reefy, Mutlaq Al-Sihan, Ahmed Alzubiadi, Muaid Aziz Baban, Khaled Mohamed Bofares, Mohamed Nabil Dandachli, Mohamed El-Sharnouby, Hossam Elsherif5 , Tarek Ghannoum, Alaa Ghita, Mohamed Ghonim, Usamah Hadi, Mohammed Hassab, Semia Sahtout Jouini, Zakaria Soliman, Mahmoud Youssef

Abstract

COVID-19's rapid sweep across the world has caused an extraordinary disruption to the otorhinolaryngology (ORL) profession and its subspecialties including the rhinology section. The present pandemic forced our specialty practitioners to make quick clinical and practice management decisions. Staff safety must receive the highest prioritization along with strategies to provide the highest quality care. The purpose of the present manuscript is to provide a narrative review of the current knowledge and committee practices regarding ORL (including rhinology) professionals' safe practice during COVID-19 pandemic and after reopen process. The present review findings will allow the clinical practitioners to understand the factors involved in reducing the risk of transmission of COVID-19 in the ORL and rhinology settings, personal protective equipment (PPE) for different ORL and rhinology practices and criteria of practice in outpatient clinic (OPC), emergency operations and ORL surgeries. The emerging evidence based on COVID-19 is rapidly changing. Further updates may be needed to this review as new details

or evidence emerge. ORL including rhinology doctors should consider the specific conditions of each individual place of work and comply with all applicable legislations.

Rhinology Online, Vol 3: 128 - 140, 2020

2. Emerging prophylaxis strategies against COVID-19

Sumita Agrawal 1, Akhil Dhanesh Goel 2, Nitesh Gupta 3

Abstract

The Novel corona virus 2019 which started as an outbreak in China in December 2019 has rapidly spread all over the world, such that on 11th March 2020 WHO declared this disease as pandemic. The emergency that the world faces today demands that we develop urgent and effective measures to protect people at high risk of transmission. WHO has accelerated research in diagnostics, vaccines and therapeutics for this novel coronavirus. Monaldi Arch Chest Dis. 2020 Mar 30;90(1).

3. Hydroxychloroquine and ivermectin: A synergistic combination for COVID-19 chemoprophylaxis and treatment?

Angela Patrì 1, Gabriella Fabbrocini 2

Free PMC article

No abstract available

J Am Acad Dermatol. 2020 Jun;82(6):e221.

4. COVID-19 Educational Videos for Rhinologists.

Produced and shared by kind permission of EUFOREA, 1-4 April 2020

https://www.europeanrhinologicsociety.org/?page_id=2143

5. Anosmia as a prominent symptom of COVID-19 infection

F Heidari 1, E Karimi 1, M Firouzifar 1, P Khamushian 2, R Ansari 1, M Mohammadi Ardehali 1, F Heidari 1

Abstract

According to WHO recommendations, everyone must protect themselves against Coronavirus disease 2019 (COVID-19), which will also protect others. Due to the lack of current effective treatment and vaccine for COVID-19, screening, rapid diagnosis and isolation of the patients are essential (1, 2). Therefore, identifying the early symptoms of COVID-19 is of particular importance and is a health system priority. Early studies from COVID-19 outbreak in China have illustrated several non-specific signs and symptoms in infected patients, including fever, dry cough, dyspnea, myalgia, fatigue, lymphopenia, and radiographic evidence of pneumonia (3, 4). Recently, a probability of association between COVID-19 and altered olfactory function has been reported in South Korea, Iran, Italy, France, UK and the United States (5-8). However, to our knowledge, the definite association between COVID-19 and anosmia has not been published

Rhinology. 2020 Jun 1;58(3):302-303.

6. Choanal Atresia

Claudio Andaloro 1, Ignazio La Mantia 2

Excerpt

Choanal atresia is a congenital disorder in which the nasal choanae, (i.e., paired openings that connect the nasal cavity with the nasopharynx), are occluded by soft tissue (membranous), bone, or a combination of both, due to failed recanalization of the nasal fossae during fetal development. If unilateral, it presents with unilateral mucopurulent discharge. If bilateral, the neonate is unable to breathe. Since newborns are obligate nasal breathers, establishing an airway is an acute otolaryngologic emergency

In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan.

2020 Aug 16.

7. Epistaxis in hospitalized patients with COVID-19

Valeria Dell'Era 1, Riccardo Dosdegani 2, Paolo Aluffi Valletti 1, Massimiliano Garzaro 1

Abstract

Spontaneous epistaxis in patients with COVID-19 can represent a clinical challenge with respect to both the risk of contamination and the treatment options. We herein present the data of 30 patients with COVID-19 who developed spontaneous epistaxis while hospitalized at Eastern Piedmont Hospital during March and April 2020. All patients received low-molecular-weight heparin during their hospital stay and required supplementary oxygen therapy either by a nasal cannula or continuous positive airway pressure. Both conditions can represent risk factors for developing epistaxis. Prevention of crust formation in patients with rhinitis using a nasal lubricant should be recommended. If any treatment is required, appropriate self-protection is mandatory

J Int Med Res. 2020 Aug;48(8):300060520951040.

8. Anosmia in COVID-19: Underlying Mechanisms and Assessment of an Olfactory Route to Brain Infection

Rafal Butowt 1 2, Christopher S von Bartheld 3 4

Abstract

In recent months it has emerged that the novel coronavirus-responsible for the COVID-19 pandemic-causes reduction of smell and taste in a large fraction of patients. The chemosensory deficits are often the earliest, and sometimes the only signs in otherwise asymptomatic carriers of the SARS-CoV-2 virus. The reasons for the surprisingly early and specific chemosensory dysfunction in COVID-19 are now beginning to be elucidated. In this hypothesis review, we discuss implications of the recent finding that the prevalence of smell and taste dysfunction in COVID-19 patients differs between populations, possibly because of differences in the spike protein of different virus strains or because of differences in the host proteins that enable virus entry, thus modifying infectivity. We review recent progress in defining underlying cellular and molecular mechanisms of the virus-induced anosmia, with a focus on the emerging crucial role of sustentacular cells in the olfactory epithelium. We critically examine the current evidence whether and how the SARS-CoV-2 virus can follow a route from the olfactory epithelium in the nose to the brain to achieve brain infection, and we discuss the prospects for using the smell and taste dysfunctions seen in COVID-19 as an early and rapid diagnostic screening tool

Neuroscientist. 2020 Sep 11;1073858420956905

9. Controlled, double-blind, randomized trial to assess the efficacy and safety of hydroxychloroquine chemoprophylaxis in SARS CoV2 infection in healthcare personnel in the hospital setting: A structured summary of a study protocol for a randomised controlled trial

Antonio Cuadrado-Lavín 1 2, José Manuel Olmos 2 3, José Manuel Cifrian 2 4, Teresa Gimenez 2 5, Marco Antonio Gandarillas 2 6, Mar García-Saiz 2 7, Maria Henar Rebollo 2 8, Victor Martínez-Taboada 2 9, Marcos López-Hoyos 2 10, María Carmen Fariñas 2 11, Javier Crespo 12 13

Abstract

Background: SARS-CoV-2 infection presents a high transmission in the group of health professionals in Spain (12-15% infected). Currently there is no accepted chemoprophylaxis but hydroxychloroquine (HDQ) is known to inhibit the coronavirus in vitro. Our hypothesis is that oral administration of hydroxychloroquine to healthcare professionals can reduce the incidence and prevalence of infection as well as its severity in this group.

Methods: Design: Prospective, single center, double blind, randomised, controlled trial (RCT).

Participants: Adult health-care professionals (18-65 years) working in areas of high exposure and high risk of transmission of SARS-COV-2 (COVID areas, Intensive Care Unit -ICUs-, Emergency, Anesthesia and all those performing aerosol-generating procedures) will be included. Exclusion criteria include previous infection with SARS CoV2 (positive SARS-CoV-2 PCR or IgG serology), pregnancy or lactation, any contraindication to hydroxychloroquine or evidence of unstable or clinically significant systemic disease.

Interventions: Patients will be randomized (1:1) to receive once-daily oral Hydroxychloroquine 200mg for two months (HC group) or placebo (P group) in addition to the protective measures appropriate to the level of exposure established by the hospital. A serological evaluation will be carried out every 15 days with PCR in case of seroconversion, symptoms or risk exposure. Primary outcome is the percentage of subjects presenting infection (seroconversion and/or PCR +ve) by the SARS-Cov-2 virus during the observation period. Additionally, both the percentage of subjects in each group presenting Pneumonia with severity criteria (Curb 65 ≥2) and that of subjects requiring admission to ICU will be determined.

Discussion: While awaiting a vaccine, hygiene measures, social distancing and personal protective equipment are the only primary prophylaxis measures against SARS-CoV-2, but they

have not been sufficient to protect our healthcare professionals. Some evidence of the in vitro efficacy of hydroxychloroquine against this virus is known, along with some clinical data that would support the study of this drug in the chemoprophylaxis of infection. However, there are still no data from controlled clinical trials in this regard. If our hypothesis is confirmed, hydroxychloroquine can help professionals fight this infection with more guarantees.

Participants: This is a single-center study that will be carried out at the Marqués de Valdecilla University Hospital. 450 health professionals working at the Hospital Universitario Marqués de Valdecilla in areas of high exposure and high risk of transmission of SARS COV2 (COVID hospital areas, Intensive Care Unit, Emergency, Anesthesia and all those performing aerosol-generating procedures) will be included.

Inclusion criteria: 1) Health professionals aged between 18 and 65 years (inclusive) at the time of the first screening visit; 2) They must provide signed written informed consent and agree to comply with the study protocol; 3) Active work in high exposure areas during the last two weeks and during the following weeks.

Exclusion criteria: 1) Previous infection with SARS CoV2 (positive coronavirus PCR or positive serology with SARS Cov2 negative PCR and absence of symptoms); 2) Current treatment with hydroxychloroquine or chloroquine; 3) Hypersensitivity, allergy or any contraindication for taking hydroxychloroquine, in the technical sheet; 4) Previous or current treatment with tamoxifen or raloxifene; 5) Previous eye disease, especially maculopathy; 6) Known heart failure (Grade III to IV of the New York Heart Association classification) or prolonged QTc; 7) Any type of cancer (except basal cell) in the last 5 years; 6) Refusal to give informed consent; 8) Evidence of any other unstable or clinically significant untreated immune, endocrine, hematological, gastrointestinal, neurological, neoplastic or psychiatric illness; 9) Antibodies positive for the human immunodeficiency virus; 10) Significant kidney or liver disease; 11) Pregnancy or lactation.

Intervention and comparator: Two groups will be analyzed with a 1: 1 randomization rate. 1)Intervention: (n = 225): One 200 mg hydroxychloroquine sulfate coated tablet once daily for two months.2)Comparator (control group) (n = 225): One hydroxychloroquine placebo tablet (identical to that of the drug) once daily for two months MAIN OUTCOMES: The primary outcome of this study will be to evaluate: number and percentage of healthcare personnel presenting symptomatic and asymptomatic infection (see "Diagnosis of SARS CoV2 infection" below) by the SARS-Cov2 virus during the study observation period (8 weeks) in both treatment arms;number and percentage of healthcare personnel in each group presenting with Pneumonia with severity criteria (Curb 65 ≥2) and number and percentage of healthcare personnel requiring admission to the Intensive Care Unit (ICU) in both treatment arms. DIAGNOSIS OF SARS COV2 INFECTION: Determination of IgA, IgM and IgG type antibodies against SARS-CoV-2 using the Anti-SARS-CoV-2 ELISA kit (EUROIMMUN Medizinische Labordiagnostika AG, Germany) every two weeks. In cases of seroconversion, a SARS-CoV-2 PCR will be performed

to rule out / confirm an active infection (RT-PCR in One Step: RT performed with mastermix (Takara) and IDT probes, following protocol published and validated by the CDC Evaluation of COVID-19 in case of SARS-CoV-2 infection RANDOMISATION: Participants will be allocated to intervention and comparator groups according to a balanced randomization scheme (1: 1). The assignment will be made through a computer-generated numeric sequence for all participants BLINDING (MASKING): Both participants and investigators responsible for recruiting and monitoring participants will be blind to the assigned arm.

Numbers to be randomised (sample size): Taking into account the current high prevalence of infection in healthcare personnel in Spain (up to 15%), to detect a difference equal to or greater than 8% in the percentage estimates through a two-tailed 95% CI, with a statistical power of 80% and a dropout rate of 5%, a total of 450 participants will need to be included (250 in each arm).

Trial status: The protocol approved by the health authorities in Spain (Spanish Agency for Medicines and Health Products "AEMPS") and the Ethics and Research Committee of Cantabria (CEIm Cantabria) corresponds to version 1.1 of April 2, 2020. Currently, recruitment has not yet started, with the start scheduled for the second week of May 2020.

Trial registration: Eudra CT number: 2020-001704-42 (Registered on 29 March 2020) FULL PROTOCOL: The full protocol is attached as an additional file, accessible from the Trials website (Additional file 1). In the interest in expediting dissemination of this material, the familiar formatting has been eliminated; this Letter serves as a summary of the key elements of the full protocol. The study protocol has been reported in accordance with the Standard Protocol Items: Recommendations for Clinical Interventional Trials (SPIRIT) guidelines (Additional file 2)

Trials . 2020 Jun 3;21(1):472.

10. Reversible Endoscopic Medial Maxillectomy: Endonasal Approach to Diseases of the Maxillary Sinus

Miguel Soares Tepedino 1, Ana Clara Miotello Ferrão 2, Hana Caroline Morais Higa 3, Leonardo Lopes Balsalobre Filho 4, Enrique Iturriaga 5, Marcelo Charles Pereira 6, Carlos Diogenes Pinheiro Neto 7

Abstract

Introduction The endoscopic access has reduced the morbidity associated with external approaches in diseases of the maxillary sinus. A reversible endoscopic medial maxillectomy (REMM) is presented as an alternative for treatment of benign maxillary diseases. **Objective** To describe the REMM technique and report four cases of patients with benign maxillary sinus conditions treated through this approach. **Methods** The present study was divided into two parts:

anatomical and case series. Two cadaveric dissections confirmed the feasibility of the REMM approach. The same technique was performed on four consecutive patients with benign maxillary sinus disease. **Results** The cadaveric dissections confirmed wide exposure to the maxillary cavity, preserving the anatomy of the maxillary sinus. In the patient series, one patient presented with an antrochoanal polyp, one had a silent sinus syndrome, one had a chronic maxillary sinusitis secondary to a gunshot, and the last one had an inverted papilloma in the maxillary sinus. In all of the cases, the REMM approach provided excellent access and adequate resection, as well as preservation of the inferior turbinate, nasolacrimal duct, and lateral wall of the nose (including its osteomucosal component). Finally, all of the patients had an uneventful postoperative course. **Conclusion** The REMM technique is an excellent surgical approach to benign conditions of the maxillary sinus. It has few limitations and appears to be associated with less morbidity than conventional techniques

Int Arch Otorhinolaryngol . 2020 Apr;24(2):e247-e252.