



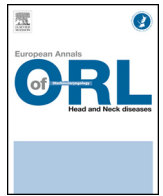
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COVID-19: Preliminary recommendations from the SFORL

## Consensus statement. Corticosteroid therapy in ENT in the context of the COVID-19 pandemic



P. Herman<sup>a,\*</sup>, C. Vincent<sup>b</sup>, C. Parietti Winkler<sup>c</sup>, N. Loundon<sup>d</sup>, V. Couloigner<sup>d</sup>, F. Tankere<sup>e</sup>, S. Tringali<sup>f</sup>, P. Gallet<sup>c</sup>, J.-F. Papon<sup>g</sup>, M. Montava<sup>h</sup>, J.-P. Lavieille<sup>h</sup>, A. Charpiot<sup>i</sup>, S. Schmerber<sup>j</sup>

<sup>a</sup> Department of otorhinolaryngology, head and neck surgery, Lariboisière university hospital, AP-HP, Paris, France

<sup>b</sup> Department of otorhinolaryngology, head and neck surgery, Lille university hospital, Lille, France

<sup>c</sup> Department of otorhinolaryngology, head and neck surgery, Nancy university hospital, Nancy, France

<sup>d</sup> Department of otorhinolaryngology, head and neck surgery, Necker hospital for sick children, AP-HP, Paris, France

<sup>e</sup> Department of otorhinolaryngology, head and neck surgery, La Pitié-Salpêtrière university hospital, AP-HP, Paris, France

<sup>f</sup> Department of otorhinolaryngology, head and neck surgery, Lyon south university hospital, Lyon, France

<sup>g</sup> Department of otorhinolaryngology, head and neck surgery, Bicêtre university hospital, AP-HP, Le Kremlin Bicêtre, France

<sup>h</sup> Department of otorhinolaryngology, head and neck surgery, La Conception university hospital, AP-HM, Marseille, France

<sup>i</sup> Department of otorhinolaryngology, head and neck surgery, Haute-pierre university hospital, Strasbourg, France

<sup>j</sup> Department of otorhinolaryngology, head and neck surgery, CHU38 university hospital, Grenoble, France

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### ABSTRACT

This consensus statement about the indications and modalities of corticosteroid treatment in the context of the COVID-19 pandemic was jointly written by experts from the French Association of Otolaryngology and Otorhinology (AFON) and from the French Society of Otorhinolaryngology, Head and Neck Surgery (SFORL). There is currently not enough data in favour of danger or benefit from corticosteroids in COVID-19, so until this matter is resolved it is advisable to limit their indications to the most serious clinical pictures for which it is well established that this type of treatment has a positive impact on the progression of symptoms. In Grade V and VI Bell's palsy according to the House-Brackmann grading system, a week's course of oral corticosteroids is recommended. Corticosteroid therapy is also recommended in cases of sudden hearing loss of more than 60 dB, either in the form of intratympanic injections or a week's course of oral medication. In rhinology, there is no indication for systemic corticosteroid therapy in the current situation. However, patients are advised to continue with their local corticosteroid therapy in the form of a nasal spray or by inhalation. Treatments with corticosteroid nasal sprays can still be prescribed if there is no alternative. Finally, systemic or local corticosteroid therapy is not indicated for bacterial ENT infections.

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### 1. Introduction

The COVID-19 pandemic has a high mortality rate for which the identified risk factors are obesity, older age (>65 years), the male sex, high blood pressure, a history of stroke, coronary heart disease, heart failure, uncontrolled diabetes, chronic respiratory illnesses, renal failure treated by dialysis, and progressive cancer (<http://www.ebola.sante.gouv.fr/soins-et-maladies/prises-en-charge-specialisees/obesite/article/obesite-et-covid-19>; <https://www.hcsp.fr/explore.cgi/avisrapports>).

Although not formally established, cirrhosis and a history of splenectomy (or homozygous sickle cell anaemia) may also be factors (<https://www.hcsp.fr/explore.cgi/avisrapports>).

There is currently no scientific data to suggest a particular benefit or risk from corticosteroids in COVID-19. The World Health Organization and numerous professional societies do not therefore contraindicate their use in cases where their benefits are well established, and recommend continuing current maintenance therapy with corticosteroids (<https://www.who.int/news-room/q-a-detail/q-a-on-covid-19-hiv-and-antiretrovirals>; <https://www.larevuedupraticien.fr/article/covid-cas-des-patients-sous-ains-corticoides-immunosuppresseurs-ou-biotherapies>; <https://drive.google.com/file/d/1aeyYiKmsiVqkGmPhSmwOkfGe>

\* Corresponding author. Department of otorhinolaryngology, head and neck surgery, 2, rue Ambroise-Paré, 75010 Paris, France.  
 E-mail address: [philippe.herman099@gmail.com](mailto:philippe.herman099@gmail.com) (P. Herman).

ZxeibweT/view). However, treatment with non-steroidal anti-inflammatory drugs has been officially advised against for all indications (<https://dgs-urgent.sante.gouv.fr/dgsurgent/inter/detailsMessageBuilder.do?id=30500&cmd=visualiserMessage>). As for corticosteroids, there is currently no scientific data establishing the potential danger of immunosuppressants, and long-term immunosuppressant therapy should only be halted if clinical symptoms of COVID-19 appear (<https://www.larevuedupraticien.fr/article/covid-cas-des-patients-sous-ains-corticoides-immunopresseurs-ou-biotherapies>; <https://drive.google.com/file/d/1aeoYiKmsiVqkGmPhSmwOkfGeZxeibweT/view>; <https://www.digestscience.com/fr/actualites/1482-informations-covid-19-recommandations-pour-les-malades-traites-par-immunopresseurs-ou-biotherapies>). In the absence of scientific publications concerning the possible risks of corticosteroid therapy during the COVID-19 pandemic, AFON and SFORL plan to restrict its indications to ENT pathologies for which efficacy is best established.

## 2. Consensus statement

### 2.1. Bell's palsy and herpetic facial paralysis

At the present time, no publication has suggested that infection with SARS-CoV-2 might lead to facial paralysis. When assessing acute facial paralysis during the COVID-19 pandemic, remote consultation with video communication should be prioritized so that the patient can be interviewed, inspected, and guided to palpate their own face and neck. Whether the paralysis is peripheral or central should be assessed, as well as its severity and the condition of the eye (impossible to close, pain, redness). Among the other anomalies to look out for, consider the presence of signs of infection, dizziness, headaches, associated neurological signs such as hemicorporeal motor deficit or damage to other cranial nerves, a burning sensation or vesicular rash in the concha suggestive of shingles of the geniculate ganglion, parotidomasserteric or cervical swelling suggesting the possibility of a malignant parotid tumour. If remote consultation does not lead to a diagnosis of idiopathic or herpetic facial paralysis, a face-to-face consultation is desirable, taking all the necessary precautions to prevent contamination of healthcare staff and patients [1]. This consultation should, if applicable, be preceded by an MRI of the facial nerve pathway.

In cases of Bell's palsy, the efficacy of corticosteroids is well established [2]. In the current pandemic situation, the therapeutic indication should be adapted to the severity of the symptoms. In incomplete forms, it is not advisable to commence treatment with drugs. Only eye care should be prescribed. In severe forms (grades V–VI according to the House-Brackmann grading system) and in the absence of any of the symptoms associated with COVID-19 (fever, cough, headaches, myalgia, anosmia without nasal obstruction, altered sense of taste, digestive problems), a short course of oral corticosteroid therapy (approximately one week) is recommended. There is no point in determining the patient's COVID-19 status prior to this treatment, given that:

- facial paralysis is not a clinical indication for this infection;
- the test available at the present time, RT-PCR on a nasopharyngeal swab, has limited reliability (40% false negatives) [3], and;
- since facial paralysis is not part of the consensus indications for these RT-PCR, sampling centres will usually refuse to do them.

The indications for diagnostic tests prior to treatment are likely to change over the course of the next few weeks or months as and when new more effective diagnostic tests arrive, in particular

serological ones. An oral antiviral treatment (valaciclovir 3 g/day) could also be prescribed in cases of shingles [4]. Oral corticosteroid therapy can usually be administered at home under the supervision of a general practitioner. Admission to hospital should be discussed in cases of unstable insulin-dependent diabetes, unstable heart disease undergoing treatment, eye disease, miscellaneous other comorbidities or old age. In subsequent treatment, ophthalmological monitoring should be set up and an ENT teleconsultation scheduled one month after corticosteroid therapy, ideally in the form of a remote consultation. In cases of facial paralysis combined with symptoms of COVID-19, the diagnostic tests to be performed and setting up of corticosteroid therapy if applicable should be discussed locally on a case-by-case basis with the team responsible for diagnosing and caring for COVID-positive patients.

### 2.2. Sudden hearing loss

As far as possible, determining the hearing threshold and type of audiometric curve should be achieved by remote consultation in line with the methods stipulated in the best practice recommendations compiled under the aegis of the French Society of Audiology (SFA) and of SFORL [5]. In cases of suspected hearing loss of more than 60 dB, a face-to-face consultation with a hearing test is desirable.

As concerns treatment, the advantage of using corticosteroids is well proven, as is the likely superiority of intratympanic injections (ITI) compared to systemic administration [6]. In the current situation, the indications for this type of treatment should be limited to severe forms with unilateral hearing loss of more than 60 dB, especially in cases of a single functioning ear, and in the absence of any clinical symptoms of COVID-19. We recommend proposing transtympanic corticosteroid injections rather than systemic treatment. Wherever possible, in order to reduce the risks of contaminating patients with SARS-CoV-2, this treatment should be conducted in an ENT clinic rather than in hospital. As in cases of facial paralysis and for the same reasons, admission to hospital should be discussed in cases of unstable insulin-dependent diabetes, unstable heart disease undergoing treatment, eye disease, miscellaneous other comorbidities or old age. Routinely carrying out RT-PCR tests on nasopharyngeal swabs before starting corticosteroid therapy is not recommended. The progression of the hearing loss should ideally be monitored by remote consultation [5]. A scan or other necessary examination should be prescribed in order to assess the cause. In cases of sudden hearing loss combined with symptoms of COVID-19, the diagnostic tests to be performed and setting up of corticosteroid therapy if applicable should be discussed locally on a case-by-case basis with the team responsible for diagnosing and caring for COVID-positive patients.

### 2.3. Flare-ups of Ménière's disease

Symptomatic or etiopathogenic treatment is delivered after teleconsultation (betahistine, acetazolamide, acetylleucine). Intratympanic corticosteroid injections, which are sometimes useful for this indication [7–10], are not recommended in the current pandemic situation due to an unfavourable risk-benefit ratio. In particular, this recommendation takes account of the risks of the patient becoming contaminated while travelling to and from the healthcare facility.

### 2.4. Anosmia and other rhinological disorders

The treatment of symptoms and disorders of the sinuses and nasal cavities during the COVID-19 pandemic was the subject of a recent publication by the French Rhinology Association (AFR) and SFORL [11]. Loss of sense of smell without nasal obstruction is a

common symptom of COVID-19, and may be a sign that a person is infected [12,13]. This anomaly will be linked to the presence of angiotensin-converting enzyme type 2 receptors, which are targeted by SARS-CoV-2, around the olfactory cleft [14], with possible obstructive inflammatory oedema in this region [15]. These types of anosmia usually have a good prognosis. Studies are ongoing concerning the possible advantage of using corticosteroids for this indication, but in the current state of knowledge they cannot be recommended.

With other pathologies, there is no indication for systemic corticosteroid therapy in the current situation, especially in cases of nasosinusal polyposis or infectious or very painful sinusitis. However, patients are advised to continue with their usual local corticosteroid therapy as a nasal spray or by inhalation. Treatments with corticosteroid nasal sprays can still be prescribed if there is no other therapeutic alternative. However, treatment with corticosteroid aerosols should be avoided due to the risk of spreading the virus to people around the patient.

### 2.5. Bacterial ENT infections

In the current pandemic situation, corticosteroid therapy is not recommended for bacterial ENT infections.

## 3. Conclusions

The authors wish to emphasize that the consensus outlined in this text is likely to change over the course of the next few weeks as and when new scientific data is published on this topic, and new diagnostic and therapeutic tools become available as the COVID-19 pandemic progresses. This advice is only intended as guidelines to be applied locally on a case-by-case basis by ENT practitioners and teams. Where decisions are particularly difficult, we recommend that these should be taken after discussion with colleagues, possibly after seeking the opinion of teams specializing in the treatment of COVID-19, and establishing a written report of what decision was taken and why. The Ethics Committee of the French National Professional ENT Council (CNPORL) could also be asked for their opinion (ceorl@sforl.org).

### Disclosure of interest

The authors declare that they have no competing interest.

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