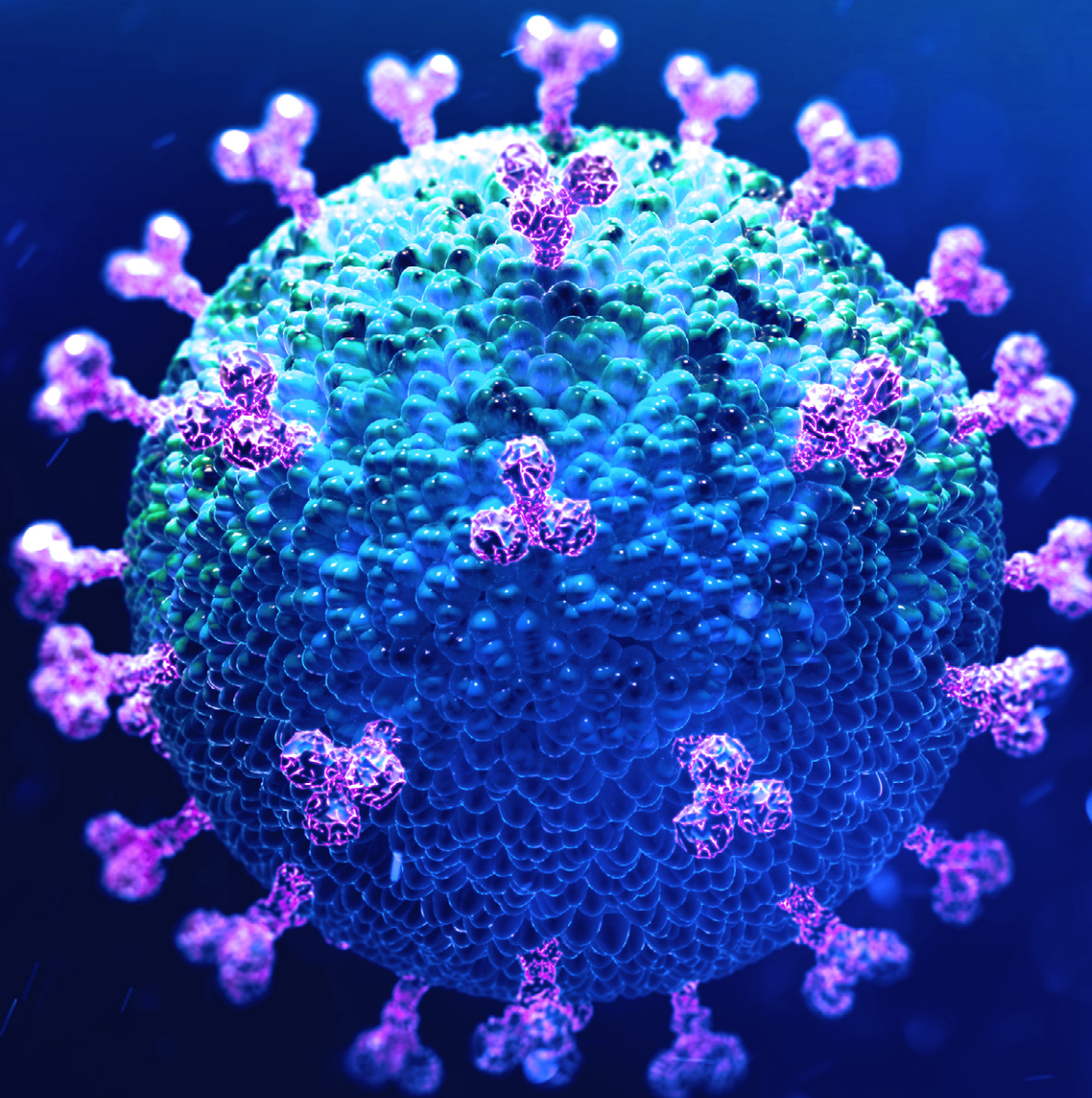


COVID-19: MITIGATING RISKS IN DENTISTRY

Dentists across the globe share their perspectives
on the benefits of using microscopes



According to the New York Times¹, of all healthcare professionals, dentists and oral and maxillofacial surgeons are the ones facing the biggest Covid-19 risk. They have both the most frequent exposure to disease and infection, and the greatest physical proximity to patients. Dental microscopes can help limit this proximity. In this article, we explore the benefits of microscope use and share perspectives from dentists around the world.



Examination of a patient using the Leica M525 ceiling mounted microscope.
Picture courtesy of Dr. Salam Abu Arqub.

Examination of patients using the Leica M320 F12 microscope with floor stand.
Picture courtesy of Dr. Baumann.

Increasing physical distance

When working with the naked eye or magnifying loupes, dental surgeons need to operate at a very small distance from the patient's mouth. They often have to bend over the patient's face and as such are in close proximity.

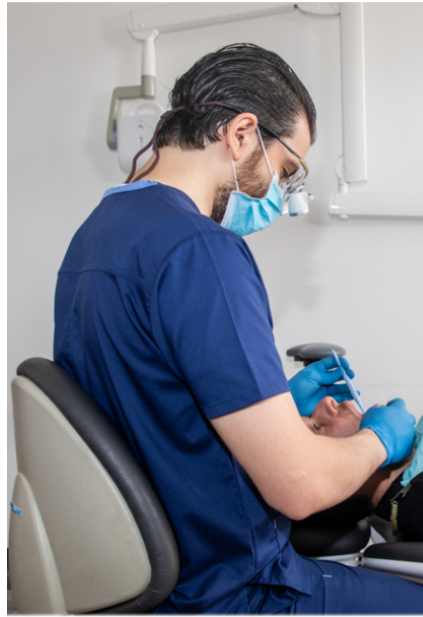
By offering better visualization, microscopes allow an increased distance between the dentist and the patient. With a microscope, dentists don't have to bend: they can maintain a neutral and upright working position while enjoying a high-resolution image, a large depth of field and optimal illumination.

Dr. Fabio Gorni, Head of the Endodontic Surgery Course at Vita-Salute San Raffaele University in Milan, Italy, says: *"Microscopes provide multiple advantages for dental practice and the long working distance represents a great plus at the time of Covid-19."*

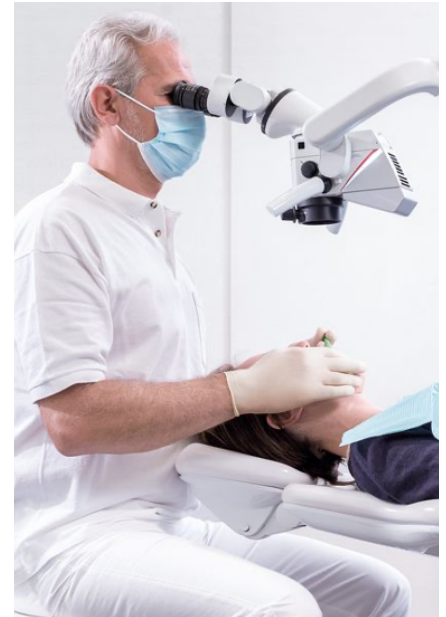
Dr. Bertrand Baumann, a French Dental Surgeon specialized in implantology and endodontics, claims: *"Practitioners need to think about changing their practice and protecting themselves from this new virus to which we are exposed. Working under a microscope distances the practitioner and his assistant from the oral cavity and therefore significantly reduces the contamination risk."*



Working with the naked eye
Picture courtesy of Dr. Iyad Ghoneim



Working with magnifying loupes
Picture courtesy of Dr. Iyad Ghoneim



Working with a Leica dental microscope

Limiting projections

Microscopes add an extra layer of protection between the dentist and the patient, reducing exposure to projections and splatter. In addition, concentrations of pathogens in aerosols decrease with increasing distance from the patient's mouth².

Dr. Salam Abu Arqub, from the Smile Engineers Dental Center in Amman, Jordan, explains: *"Leica microscopes help keep a good distance between the dentist and the patient, which is more difficult to achieve in a traditional setting. This distance decreases the possibility of being exposed to patient projections, protecting the dentist. In addition, the use of the microscope helps work micro-minimal invasively because the more you see, the less you drill. And less drilling decreases the time the hand piece is used, which reduces exposure to patient projections."*

Dr. Iyad Ghoneim, a dentist at the Safad Dental Center in Riyadh, Saudi Arabia, adds: *"Microscopes can help significantly reduce the possibility that the operator is infected."*

Supporting hygiene

Leica Microsystems microscopes are designed for easy cleaning and hygiene, with an antimicrobial coating reducing pathogens on the microscope surface. Handles can be removed and sterilized. In addition, dental microscopes are virtually jointless with cables routed internally.

Dr. Bertrand Baumann says: *"The Leica M320 microscope is very ergonomic, with no peripherals or external connections so it enables perfect disinfection, which no other dental microscope has allowed me to do."*

Reassuring the patient

The pandemic could lead to increased patient stress and anxiety. Dental microscopes help explain dental procedures, supporting "tell, show and do" strategies. They can contribute to increased trust and confidence making the patient more relaxed.

At Leica, we are committed to supporting you in your practice. We help you find the right microscope for your needs and provide advice on set-up and daily use.

For more information about Leica dental surgery microscopes:



Dr. Fabio Gorni is the Head of the Endodontic Surgery Course at Vita-Salute San Raffaele University Dental School in Milan, Italy. He is also the Head of the Peri-oral Aesthetics Course. Dr. Gorni is Past President of the Italian Society of Endodontics (SIE) and Co-Founder of StyleItaliano Endodontics. He uses a [Leica M525 F20](#) dental microscope.



Dr. Bertrand Baumann is a French Dental Surgeon specialized in implantology and endodontics. He is the former Head of the Dentistry Department of the Mulhouse Hospital, in the east of France. Dr. Baumann is the Founder of Bleu Blanc Dent SAS. He uses a [Leica M320 F12](#) dental microscope.



Dr. Salam Abu Arqub works at the Smile Engineers Dental Center, a leading dental clinic in Amman, Jordan. The clinic aims to provide quality and comfortable dental care for all patients. It is equipped with state-of-the-art technology. He uses a [Leica M525](#) dental microscope.



Dr. Iyad Ghoneim is an Oral Implantologist and Oral Surgeon working at the Safad Dental Center in Riyadh, Saudi Arabia. He is the editor-in-chief of the Arab Journal of Oral Implantology, the first Arab dental journal. He is also the Founder and Director of the MHG Institute of Dental Education. He uses the [PROvido](#) microscope from Leica Microsystems.

Note: The statements of the healthcare professionals in this article reflect only their personal opinion and experience and do not necessarily reflect the opinion of any institution with whom they are affiliated.

1. [The Workers Who Face the Greatest Coronavirus Risk, The New York Times, 15 March 2020](#)
2. [Guidelines for Infection Control, Third Edition, Australian Dental Association, 2015](#)

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