



THE DC PRACTICE

Infection Control in the Age of the Coronavirus

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Coronavirus disease (COVID-19) has rapidly emerged as a global health threat. According to the Centers for Disease Control (CDC) the COVID-19's incubation period is two to 14 days. Symptoms of the infection include fever, cough, fatigue, myalgia, difficulty breathing and diarrhea. Complications include acute respiratory distress syndrome, heart arrhythmia and shock.

According to the World Health Organization (WHO), during previous coronavirus outbreaks such as SARS, human-to-human transmission occurred through droplets and contacts. The mode of transmission of COVID-19 may be similar. Thus, the close proximity between chiropractors and patients during neuromusculoskeletal examination and direct spinal manipulation (particularly supine cervical adjusting, which exposes the chiropractor to a patient's sneeze) may pose an infectious risk.

Furthermore, chiropractic pain and wellness care, therapeutics and progressive interim evaluations often involve multiple encounters, including spinal manipulation treatment. Thus, it is not uncommon that our patients may have a prolonged stay in our clinics to complete the entire treatment.



This factor may potentially increase the risk of cross-infection between patients, and between healthcare workers and patients in outpatient clinics in chiropractic. Although unknown at this time, it would likely be plausible that within a chiropractic setting, there is a lesser potentiality for transmission in comparison with other clinical allopathic disciplines who treat the "sick patient."

The various recommended control measures within the current literature include: (1) administration guidelines, (2) environmental control and (3) universal precautions. In my practice, a specific hierarchy of control measures were adopted as follows, based on the above, as well as my experience as a former paramedic and current chiropractor trained in infection control.

1. Administration Guidelines

In order to lower patient attendance, when necessary, text messages for inquiry that included our office phone number were sent to patients to reschedule appointments. To minimize cross-infection of COVID-19, a triage phone system was set up to identify patients with fever, respiratory symptoms, acute dry cough or recent travel to outbreak areas; and to encourage these individuals to postpone their appointments for at least two weeks.

Of the accepted patients scheduled, each was reminded to call the office on arrival by use of their mobile phone and remain in their vehicle until our office notified them by text message that the DC was ready to see them. No one has waited longer than 10 minutes. This decreased the amount of exposure transmission among patients in order to avoid any wait time inside the reception area; and allowed for disinfecting of table / equipment surfaces between patients and proper surface drying airtime.

The recently developed "Coronavirus 2019 screening questionnaires" also may be used for the afebrile patient. These are 4-5 questions that inquire on fever, travel, occupation (health care worker?), contact (with a suspected or confirmed case?) and clustering. If the patient fulfills any of

the above criteria, their appointment should be postponed for at least 14 days (again, our current understanding of the incubation period of COVID-19).

Equally important is developing infection control training and frequent staff monitoring for your chiropractic business. Recognize that your infection control training will need to be frequently revisited and changed as necessary in accordance to newly acquired public health information.

2. Environmental Control

To reduce droplet transmission of COVID-19, installation of protective face shields on tables, frequent disinfection of equipment (to include blood pressure cuffs, handheld instruments etc.) and provision of eye protection to staff with patient contact were implemented. Micro-aerosol vapocoolant sprays for stretch therapies and disinfectant aerosols were avoided, as it may provoke sneezing and cause generation of droplets. Infection control training and procedure policies were developed and provided to clinical staff. All staff were advised to measure their own body temperatures before work and promptly report any symptoms of upper respiratory tract infection.

Interestingly, as a former paramedic trained in infection control, I made an early transition into chiropractic practice by using the same infection control measures I used back then (e.g., sodium hypochlorite [diluted bleach], which I am happy to say is included in the current EPA list of approved products).

As a student of chiropractic some 25-plus years ago, I also was the first to recognize the need for an infection control program regarding the technique rooms at Los Angeles College of Chiropractic, now Southern California University of Health Sciences. Drs. Reed Phillips and Al Adams agreed without reservation, and together, we formulated and implemented a written infection control measure using OSHA guidelines and other resources for the campus technique areas. To my understanding, this was the first chiropractic college to undertake such measures, and it soon caught on at other campuses.

According to the EPA, products registered as disinfectant products have qualified for use against COVID-19 through the agency's Emerging Viral Pathogen program. This program allows product manufacturers to provide EPA with data, even in advance of an outbreak, that shows their products are effective against harder-to-kill viruses than SARS-CoV-2. It also allows additional communications intended to inform the public about the utility of these products against the emerging pathogen in the most expeditious manner.

3. Universal Precautions

Masking, hand hygiene and appropriate use of personal protective equipment (PPE) were promoted. Strict policies were put in place such that no clinical staff member could leave the clinic at the end of their shift wearing their uniform scrubs or laboratory coats. In order to avoid any cross contamination to their home, it was also recommended that their uniform and clinic shoes be hand carried to their home in a plastic bag for later disinfecting or laundering. This was adopted from universal precaution methods widely recognized in use by EMS personnel (EMTs, paramedics, firefighters, etc.) who may unwittingly encounter an unsuspected source of contaminate transmission.

Chiropractors may want to consider wearing masks and eye protection when seeing patients. Again, this measure is reserved in consideration for the potential of respiratory droplet exposure. In addition, I need not caution the well-educated chiropractor on the importance of hand washing before and after every patient.

Clinical Pearls

The purpose of this article was to share our local experience of increasing infection control measures in chiropractic to minimize COVID-19 infection of both chiropractors and patients. In order to minimize transmission of COVID-19, DCs should work closely with local infection control teams to implement infection control measures appropriate for their own clinical settings. Chiropractors are encouraged to stay informed by accessing the public health officer's website recommendations within their own community.

Resources

- "WHO Director-General's Remarks at the Media Briefing on 2019-nCoV on 11 February 2020." World Health Organization, Feb. 11, 2020.
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- EPA Releases List of Disinfectants to Use Against COVID-19. Environmental Protection Agency, March 5, 2020.
<https://www.epa.gov/newsreleases/epa-releases-list-disinfectants-use-against-covid-19>
- Egan JT. "Chiropractic Student Infection Control Practices and Methicillin-Resistant Staphylococcus aureus Skin Infections."
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MAY 2020