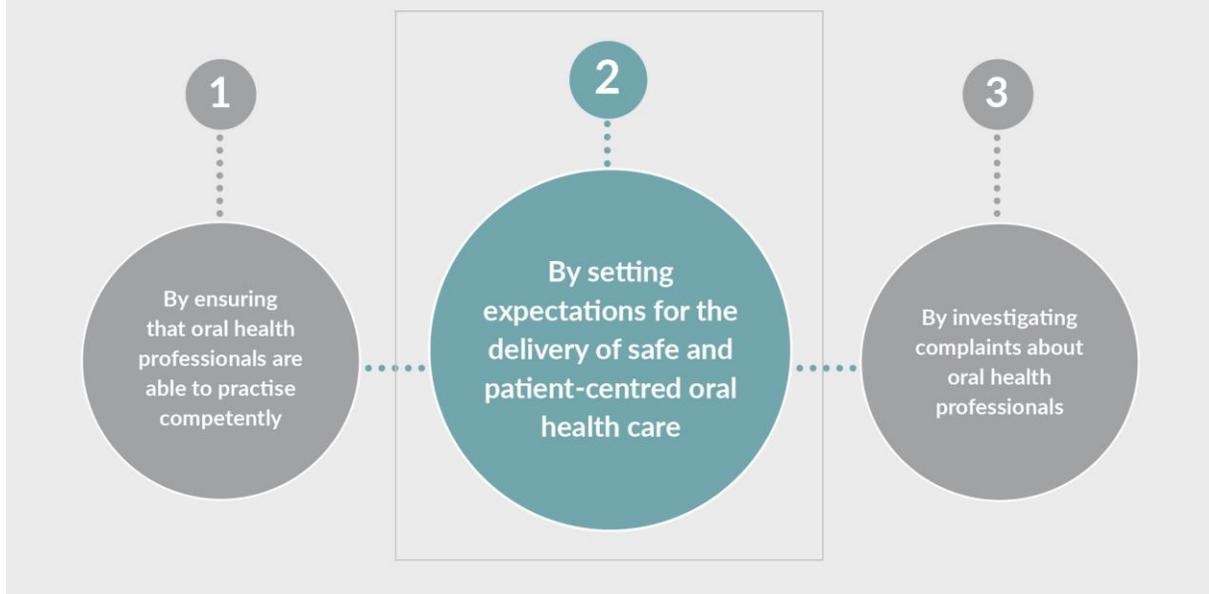


Expectations for clinical and ethical practice

Root of the Matter: Heart and Stroke, Access September 2015

Applies to Dental Hygienists

There are three main ways that the BC College of Oral Health Professionals protects the public:



The British Columbia College of Oral Health Professionals (BCCOHP) was created on September 1, 2022 through the amalgamation of four health regulatory colleges: the College of Dental Hygienists of BC, the College of Dental Surgeons of BC, the College of Dental Technicians of BC, and the College of Denturists of BC. All current requirements for standards of clinical and ethical practice issued by the four colleges remain in place upon amalgamation. This document was created by the College of Dental Hygienists of BC and will be updated to reflect the amalgamation.

Root of the Matter: Heart Attack and Stroke (Access, September 2015)

Authored by the CDHBC Dental Hygiene Practice Advisors

In the Spring 2010 issue of *Access* the College published a Root of the Matter article with information on the timing of dental hygiene treatment for clients following the occurrence of a heart attack or stroke. In response to continued interest in this topic, we are now publishing an updated and expanded version of this article.

To treat or not to treat: What is safe practice following a heart attack or stroke?

In Canada, over 70,000 individuals experience a heart attack each year, which is approximately one every 7 minutes.¹ Additionally, more than 50,000 Canadians experience a stroke annually, which is approximately one every 10 minutes.¹ Given the prevalence of both of these conditions, there is a strong likelihood that a client may present to their dental hygienist for scheduled treatment within a short time period following a heart attack or stroke. This should promptly raise the question of whether the client is medically stable enough to safely undergo potentially invasive dental hygiene therapy.

For a client who has previously had a stroke, dental hygiene textbooks recommend that elective treatment be avoided within 6 months of the episode;²⁻⁴ this is because up to one third of strokes recur within 1 month of the initial event and the risk remains elevated for at least 6 months.³ Textbook recommendations for a client who has previously had a heart attack vary, with some indicating that elective dental treatment should be deferred for a minimum of 30 days following the incident (if the client's condition is stable and without additional complications)^{2,3} while others recommend a 6 month deferral.⁴

Although this information provides a good cautionary window between the incident and potentially stressful oral procedures, there is little evidence to support the recommendations as being appropriate for all clients. Each heart attack or stroke survivor has had a completely unique experience with their own set of complicating factors and healing rates. As such, it may be more appropriate to consider each individual independently, and to obtain and document a medical consult if there are any concerns regarding the client's medical status and safety in proceeding with dental hygiene treatment.⁴

In communication to the CDHBC, the American Heart Association (AHA) has indicated there are currently no specific guidelines regarding the length of time required before providing dental hygiene treatment to a client who has had a stroke or heart attack.^{5,6} For this reason, the AHA recommends that each client be considered on a case-by-case basis when determining fitness for treatment.⁵ The client's cardiologist, neurologist or physician (as appropriate for the condition) should be consulted prior to proceeding with dental hygiene treatment in order to determine whether the client is in fact healthy enough to withstand the

potential stress and medical impact of these procedures. Preventing medical emergencies and providing safe care may necessitate postponing dental hygiene treatment until the client's health has stabilized.

As drug therapies for treating and preventing stroke evolve, it remains essential to thoroughly update each client's medical history and medication list. This includes understanding the complications and dental considerations associated with the medication, prior to providing care. Both stroke and heart attack survivors may receive antiplatelet or anticoagulant therapy which predisposes them to excessive bleeding and therefore physician consultation is also recommended to determine whether the therapy should be altered.² Appropriate documentation in the client's chart of any communication with the client's physician is required.

Lastly, it is important for dental hygienists to remain current with considerations and modifications required when treating someone with cardiovascular concerns, as the perceived stressful nature of a dental hygiene appointment may potentially precipitate a heart attack or stroke while the client is in the chair. Such considerations may include, but are not limited to^{2,3}:

- Measuring and documenting the client's blood pressure and modifying treatment as required
- Incorporating stress reduction protocols
- Monitoring the client for signs of cardiac complications (ie. chest pain, shortness of breath, dizziness, fatigue)
- Booking short morning appointments
- Ensuring the client's INR number is within an acceptable range prior to providing care if the client has been placed on anticoagulant therapy (consulting the client's physician may be required).
- Limiting epinephrine to the cardiac dose of 0.04mg (i.e. 2 carps of 1:100,000epi)

References:

1. Heart and Stroke Foundation. Statistics [Internet]. 2015 Available from: <http://www.heartandstroke.com/site/c.iKlQLcMWJtE/b.3483991/k.34A8/Statistics.htm>
2. Darby ML, Walsh M. Dental Hygiene Theory and Practice. 4th ed. St Louis: Saunders; 2015.
3. Little JW, Falace DA, Miller CS, Rhodus NL. Dental Management of the Medically Compromised Patient. 8th ed. St Louis: Mosby; 2013.
4. Malamed SF. Medical Emergencies in the Dental Office. 7th ed. St Louis: Mosby; 2015.
5. American Heart Association. Email from Jessica Swanner (AHA.NSC.General@heart.org) 2015 Aug 4 [cited 2015 Aug 6].
6. American Heart Association. Email from Cherish Hart (cherish.hart@heart.org) 2009 Nov 2 [cited 2015 Aug 6].