

 <p>College of Dental Hygienists of Ontario</p>	<p>Protecting your health and your smile!</p>	
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COLLEGE OF DENTAL HYGIENISTS OF ONTARIO ADVISORY	
ADVISORY TITLE	
Use of the dental hygiene interventions of scaling of teeth and root planing including curetting surrounding tissue, orthodontic and restorative practices, and other invasive interventions for persons ¹ with kidney disease or kidney failure.	
ADVISORY STATUS	
Cite as <i>College of Dental Hygienists of Ontario, CDHO Advisory Kidney Disease and Kidney Failure, 2010-07-15</i>	
INTERVENTIONS AND PRACTICES CONSIDERED	
Scaling of teeth and root planing including curetting surrounding tissue, orthodontic and restorative practices, and other invasive interventions (“the Procedures”).	
SCOPE	
DISEASE/CONDITION(S)/PROCEDURE(S)	
Kidney disease and kidney failure	
INTENDED USERS	
Advanced practice nurses Dental assistants Dental hygienists Dentists Denturists Dieticians Health professional students	Nurses Patients/clients Pharmacists Physicians Public health departments Regulatory bodies
ADVISORY OBJECTIVE(S)	
To guide dental hygienists at the point of care relative to the use of the Procedures for persons who have kidney disease or kidney failure, chiefly as follows.	
<ol style="list-style-type: none"> 1. Understanding the medical condition. 2. Sourcing medications information. 3. Taking the medical and medications history. 4. Identifying and contacting the most appropriate healthcare provider(s) for medical advice. 	

¹ Persons includes young persons and children

5. Understanding and taking appropriate precautions prior to and during the Procedures proposed.
6. Deciding when and when not to proceed with the Procedures proposed.
7. Dealing with adverse events arising during the Procedures.
8. Record keeping.
9. Advising the patient/client.

TARGET POPULATION

Child (2 to 12 years)
 Adolescent (13 to 18 years)
 Adult (19 to 44 years)
 Middle Age (45 to 64 years)
 Aged (65 to 79 years)
 Aged, 80 and over
 Male
 Female

Parents, guardians, and family caregivers of children, young persons and adults with kidney disease or kidney failure.

MAJOR OUTCOMES CONSIDERED

For persons who have kidney disease or kidney failure: to maximize health benefits and minimize adverse effects by promoting the performance of the Procedures at the right time with the appropriate precautions, and by discouraging the performance of the Procedures at the wrong time or in the absence of appropriate precautions.

RECOMMENDATIONS

UNDERSTANDING THE MEDICAL CONDITION

Terminology used in this Advisory

Resources consulted

- [The Kidney Foundation of Canada: Chronic Kidney Disease](#)
- [Government of BC: Chronic Disease Management](#)
- [Treatment Methods for Kidney Failure: Peritoneal Dialysis](#)
- [Treatment Methods for Kidney Failure: Hemodialysis](#)

1. Acute renal failure
 - a. results from sudden loss of kidney function caused by
 - i. accident
 - ii. heavy blood loss
 - iii. some medications and poisons
 - b. may lead to permanent loss of kidney function or, in the absence of serious damage, recovery.
2. Candida, oral candidiasis, also termed thrush or oral moniliasis, is
 - a. a yeast infection of the mouth or throat
 - b. most commonly caused by *Candida albicans*.

3. Childhood nephrotic syndrome, also called nephrosis, in which the kidneys leak large quantities of protein into the urine, leading to edema often of the eyelids, feet and ankles and, eventually, the abdomen.
4. Chronic kidney disease, chronic renal insufficiency
 - a. is the commonest pattern in kidney disease
 - b. develops slowly
 - c. may be silent for many years, but presents various symptoms as the kidney function deteriorates, including
 - i. frequent headaches
 - ii. fatigue
 - iii. itching over the entire body
 - d. as it deteriorates, [uremia](#) develops because excretion of waste products and excess water is impaired; additional symptoms become evident, including
 - i. frequent urination or reduction in urinary output
 - ii. swelling of legs, ankles, feet, face and/or hands
 - iii. metallic taste in the mouth
 - iv. nausea and vomiting
 - v. loss of appetite
 - vi. shortness of breath
 - vii. feelings of cold
 - viii. difficulty with mental concentration
 - ix. dizziness
 - x. leg pain or muscle cramps.
 - e. may progress to permanent kidney failure, with high risk of
 - i. death from stroke
 - ii. heart attack.
5. End-stage renal disease
 - a. is near-total or total and permanent kidney failure
 - b. requires dialysis or kidney transplant to sustain life.
6. Glomerular filtration rate, the rate at which the kidneys clear creatinine, a waste product of muscle activity, from the body.
7. Glomerulonephritis, also called nephritis, a disease of the kidneys in which the [glomeruli](#) become inflamed or damaged, allowing blood protein and red blood cells to pass into the urine.
8. Hemodialysis, a process for cleaning the blood, in which blood is withdrawn from the body by a machine and passed through an artificial kidney called a dialyzer.
9. Lesion, a term variously and loosely used in medicine to refer to such things as
 - a. any abnormality of tissue in the body, including the mouth and skin
 - b. any localized abnormal structural change in a bodily part
 - c. a mass especially before a definite diagnosis is established
 - d. cancer
 - e. an injury to living tissue, such as a cut or break in the skin.
10. Nephron, of which each kidney possesses more than a million, comprises
 - a. the glomerulus, which filters water-soluble waste products from the blood
 - b. the attached tubule, which reabsorbs much of the water.
11. Oral ulcer, an open [lesion](#), often painful, inside the mouth or upper throat, an alternative name for
 - a. a mouth ulcer

- b. an aphthous ulcer
 - c. aphthous stomatitis, also known as a [canker sore](#)
 - d. a cancerous ulcer.
- 12. Palliative care, services of care for persons towards the end of life with terminal illnesses, when the focus of the care
 - a. is relieving symptoms
 - b. attending to physical and spiritual needs.
- 13. Peritoneal dialysis, a form of dialysis used to remove waste products and excess water in which
 - a. the peritoneal cavity is filled with a special dialysis fluid
 - b. the peritoneum filters excess water and waste from the blood into the dialysis fluid
 - c. the dialysis fluid is drained from the body and discarded in a procedure that is repeated four to six times in every 24-hour period.
- 14. Proteinuria, also called albuminuria, a condition in which the urine contains an abnormal amount of protein; albumin is the main protein in the blood.
- 15. Risk factor, a term
 - a. used strictly to identify anything that affects the person's chances of developing a disease such as oral cancer
 - b. used loosely to refer to things that in themselves may not affect the person's chances of developing a disease such as oral cancer but which may signal the presence of things that are risk factors as strictly defined
 - c. that informs medical history-taking and examination, which takes account of epidemiological evidence
 - d. that, in the absence of clear-cut epidemiological data, often cannot be quantified or even rank-ordered for importance.
- 16. Sicca syndrome, a term reserved for the combination of dryness of the mouth and eyes, regardless of cause; when accompanied by lymphocyte infiltration of the salivary glands is named Sjögren syndrome ([CDHO Advisory](#)).
- 17. Supportive care, services of care to help persons meet the physical, emotional and spiritual challenges arising from the condition or its treatment.
- 18. Uremia, build-up in the blood of waste products that failing kidneys are unable to remove from the body.
- 19. Wilms' tumour, also called nephroblastoma, a rare kidney cancer in children.
- 20. Xerostomia, abnormal dryness of the mouth resulting from decreased secretion of saliva; has various causes including
 - a. [sicca syndrome](#)
 - b. Sjögren syndrome ([CDHO Advisory](#))
 - c. some medications.

Overview of kidney disease and kidney failure

Resources consulted

- [The Kidney Foundation of Canada: Chronic Kidney Disease](#)
- [The National Institute of Diabetes and Digestive and Kidney Diseases: Kidney Disease and Kidney Failure](#)
- [National Kidney Foundation Classification of Chronic Kidney Disease: Definition and Classification Of Stages Of Chronic Kidney Disease](#)

Kidney disease and kidney failure

1. Is the loss of the filtering capacity of kidneys, [kidney failure](#).
2. In its chronic form
 - a. has no cure
 - b. is [classified](#) in five stages based on the [level of kidney function](#), where stage 5 is kidney failure
 - c. has as [risk factors](#)
 - i. diabetes mellitus ([CDHO Advisory](#))
 - ii. hypertension ([CDHO Advisory](#))
 - iii. family history of chronic kidney disease
 - iv. age above 60 years
 - v. genetic heritage of
 1. family histories of kidney disease
 2. First Nations
 3. Pacific Islanders
 4. African descent.
3. Is caused by damage to [nephrons](#) from [kidney diseases](#), which
 - a. can strike at any age
 - b. affect an estimated 2 million Canadians
 - c. most commonly comprise
 - i. diabetic nephropathy caused by damage to the nephrons by unused blood sugar (35 percent of new cases)
 - ii. renal vascular disease, which damages the small blood vessels of the kidneys (19.5 percent of new cases)
 - iii. [glomerulonephritis](#) (11.5 percent of new cases) and other glomerular diseases which slowly destroy kidney functioning by attacking the [glomeruli in the nephrons](#)
 - iv. inherited and congenital kidney diseases, such as polycystic kidney disease
 1. which is a genetic disorder marked by multiple cysts in the kidneys
 2. in which the cysts slowly replace much of the kidneys, reducing kidney function and leading to kidney disease or kidney failure
 - v. other causes of kidney disease, such as
 1. direct and forceful trauma to the kidneys
 2. toxicity of some [over-the-counter medications](#)
4. May develop rapidly from poisoning or injury.
5. Occurs
 - a. mostly slowly and silently over a period of years
 - b. in both kidneys simultaneously because kidney diseases typically attack bilaterally.
6. Progresses to end-stage renal disease in many patients
 - a. even with treatment
 - b. for whom the options are
 - i. [hemodialysis](#)
 - ii. [peritoneal dialysis](#)
 - iii. [transplantation](#)
 - iv. [conservative care](#).
7. Other treatments for kidney disease include
 - a. [proper diet](#) ([CDHO Advisory](#))
 - b. [medications](#).

Table 1: Kidney disease

Kidney disease in adults	Kidney disease in children
Diabetes Insipidus	Childhood Nephrotic Syndrome
End-Stage Renal Disease	Growth Failure in Children With Kidney Disease
Glomerular Diseases	Hemolytic Uremic Syndrome
Goodpasture’s Syndrome	Kidney Disease in Children
High Blood Pressure and Kidney Disease	Overview of Kidney Diseases in Children
IgA Nephropathy	School, Family Problems of Children With Kidney Failure
Kidney Disease of Diabetes	Treatment Methods for Kidney Failure in Children
Lupus Nephritis	
Nephrotic Syndrome in Adults	
Polycystic Kidney Disease	
Renal Tubular Acidosis	
Simple Kidney Cysts	

Table 2: Kidney failure

Kidney failure in adults
Amyloidosis and Kidney Disease
Anemia in Kidney Disease and Dialysis
Eat Right to Feel Right on Hemodialysis
Hemodialysis
Hemodialysis Dose and Adequacy
Kidney Failure Glossary
Kidney Failure: Choosing a Treatment That’s Right for You
Kidney Failure in Adults
Kidney Transplantation
Peritoneal Dialysis
Peritoneal Dialysis Dose and Adequacy
Vascular Access for Hemodialysis

Comorbidity, complications and associated conditions

Comorbid conditions are those which co-exist with kidney disease and kidney failure but which are not believed to be caused by it. Complications and associated conditions are those that may have some link with it. Distinguishing among comorbid conditions, complications and associated conditions may be difficult in clinical practice.

Resources consulted

- [American Family Physician Clinical Practice Guideline: Clinical Practice Guidelines for Chronic Kidney Disease in Adults](#)

- [Australian Institute of Health and Welfare: Comorbidity of cardiovascular disease, diabetes and chronic kidney disease in Australia](#)
 - [WellCare Summary: Clinical Practice Guidelines for the Management for the Evaluation, Classification and Stratification of Chronic Kidney Disease](#)
1. Cardiovascular disease and diabetes as comorbidities of chronic kidney disease
 - a. mainly affect older people so that, with a rapidly ageing population, comorbidity is rising
 - b. reflect complex interrelationships between the comorbidities, kidney disease and kidney failure
 - c. require
 - i. control of common risk factors
 - ii. improvement of disease management, in which dental hygiene has an important role.
 2. Chronic kidney disease
 - a. increases the risk of cardiovascular and vascular disease, especially
 - i. cerebrovascular disease
 - ii. coronary heart disease
 - iii. heart failure
 - iv. peripheral vascular disease
 - b. is caused
 - i. most commonly by
 1. [diabetes \(CDHO Advisory\)](#) which, despite insulin injections, may
 - a. damage blood vessels in the kidney
 - b. through sugar build-up promote infection of the urinary system, leading to kidney infection
 - c. through loss of protein in the urine be associated with edema
 - d. lead to damage of the [glomeruli](#) and kidney failure
 2. [high blood pressure \(CDHO Advisory\)](#) which may
 - a. damage the kidneys
 - b. also be caused by kidney disease
 - ii. by other diseases
 1. [glomerulonephritis](#)
 2. [systemic lupus erythematosus \(CDHO Advisory\)](#) with kidney involvement
 3. [Wilms' tumour](#)
 4. polycystic kidney disease
 5. urinary tract obstruction
 6. reflux nephropathy
 7. drug- or medication-induced kidney problems
 - c. is also associated with conditions or factors such as
 - i. autoimmune diseases
 - ii. bacterial infections
 - iii. cancer
 - iv. family and ethnic history
 - v. low birth weight
 - vi. recovery from acute kidney failure

- vii. reduction of kidney mass
- viii. urinary tract infections or stones.

Oral health considerations

Resources consulted

- [CMAJ: Guidelines for the management of chronic kidney disease](#)
 - [JCDA: The Dental Health Status of Dialysis Patients](#)
 - [National Kidney and Urologic Diseases Information Clearinghouse: Treatment Methods for Kidney Failure: Peritoneal Dialysis](#)
 - [National Kidney and Urologic Diseases Information Clearinghouse: Treatment Methods for Kidney Failure: Hemodialysis](#)
1. As of November 2009, Canadian guidelines for the management of chronic kidney disease
 - a. were silent on oral health considerations other than mentions of the metallic taste in the mouth associated with chronic kidney disease
 - b. highlighted the importance of [nutrition](#) but not the condition of the mouth and teeth as a factor linked with adequacy of nutrition.
 2. The published indexed literature of oral healthcare suggests that chronic kidney disease and kidney failure are associated—whether as a result of the kidney’s problems, its comorbidities, its complications, or its treatment with medications—with such conditions as
 - a. [xerostomia](#)
 - b. enamel abnormalities
 - c. inflammation of the mouth and salivary glands
 - d. loose and painful teeth
 - e. loss of bone from the jaw
 - f. [mouth ulcers](#)
 - g. narrowing of the pulp chamber
 - h. periodontal disease
 - i. premature tooth loss
 - j. susceptibility to infection, which may call for antibiotic prophylaxis.
 3. Specific studies suggest that
 - a. the oral health of dialysis patients is poor and requires greater attention
 - b. persons with advanced chronic kidney disease close to the start of dialysis tend to have oral health problems that require attention
 - c. adults who have no teeth may be more likely to suffer from chronic kidney disease than those who still have teeth
 - d. an association may exist between periodontal disease and renal insufficiency
 - e. inflammation may be a common link between periodontal and kidney diseases
 - f. medication records may be incomplete for patients/clients receiving oral healthcare.
 4. Kidney function is an important consideration for dental hygiene because
 - a. the dosages of medications excreted by the kidneys may have to be correlated with measurements of kidney function, so that the dental hygienist should discourage patients/clients from adjusting their medications without advice from the prescribing physician

- b. the kidney handles minerals, such as calcium and phosphorous, essential for nutrition, so that the dental hygienist should discourage patients/clients from adjusting their diets without the advice of their physicians or nutritionists.
- 5. Dialysis, antibiotic prophylaxis and the Procedures
 - a. prior to invasive oral healthcare procedures, antibiotic prophylaxis may be required for persons receiving hemodialysis or peritoneal dialysis
 - b. for a patient/client receiving dialysis, the dental hygienist should obtain advice from the primary care or specialist care provider before performing the Procedures.
- 6. [Transplantation](#) creates risk of serious mouth problems and complicates oral healthcare
 - a. because of side effects from transplant anti-rejection, immunosuppression medications, which include
 - i. [xerostomia](#)
 - ii. [mouth ulcers](#)
 - iii. infections, such as
 - 1. gingivitis
 - 2. [thrush](#)
 - iv. gingival overgrowth
 - v. tumours in the mouth cancers that occur in some transplant patients, especially those who have smoked ([CDHO Advisory](#))
 - b. which, along with all mouth problems, should be treated.

MEDICATIONS SUMMARY

Sourcing medications information

1. Adverse effect database
 - [Health Canada's Marketed Health Products Directorate](#)
toll-free 1-866-234-2345
 - [Health Canada's Drug Product Database](#)
2. Specialized organizations
 - [Government of BC, Chronic Disease Management](#)
 - [British Columbia Chronic Kidney Disease – Identification, Evaluation and Management of Patients](#)
 - [US National Library of Medicine and the National Institutes of Health Medline Plus Drug Information](#)
 - [WebMD](#)
 - [National Kidney Disease Educational Program: Chronic Kidney Disease and Drug Dosing](#)
3. Medications considerations

All medications have potential side effects whether taken alone or in combination with other prescription medications, or over-the-counter (OTC) or herbal medications.
4. Information on herbals and supplements
 - [US National Library of Medicine and the National Institutes of Health Medline Plus Drug Information All Herbs and Supplements](#)

5. Complementary and alternative medicine

- [National Center for Complementary and Alternative Medicine](#)

Types of medications**Warnings**

Individual medications may be subject to important warnings, which

1. change from time to time
2. may affect the appropriateness, efficacy or safety of the Procedures
3. are accessible via the links to the particular medications listed below or through the specialized organizations listed above
4. through the links, should be viewed by dental hygienists in the course of their familiarizing themselves about a medication or combination of medications identified in the patient/client's medical and medications history.

Medications

1. Medication strategy for chronic kidney disease emphasizes aggressive control of
 - a. blood pressure, targeted at keeping it at 130/80 mm Hg or less, with
 - i. angiotensin-converting enzyme inhibitors, including
 - [benazepril](#) (Lotensin®)
 - [captopril](#) (Capoten®)
 - [enalapril](#) (Vasotec®)
 - [fosinopril](#) (Monopril®)
 - [lisinopril](#) (Prinivil®, Zestril®)
 - [quinapril](#) (Accupril®)
 - [ramipril](#) (Altace®)
 - [trandolapril](#) (Mavik®)
 - ii. angiotensin-II receptor antagonists, including
 - [candesartan](#) (Atacand®)
 - [irbesartan](#) (Avapro®)
 - [losartan](#) (Cozaar®)
 - [telmisartan](#) (Micardis®)
 - [valsartan](#) (Diovan®)
 - b. high blood sugar in diabetics, requiring treatment with insulin
 - c. lipid levels that are abnormal and which, to reduce the risk of cardiovascular disease, are treated with
 - [rosuvastatin](#) (Crestor®)
 - [atorvastatin](#) (Lipitor®)
 - d. [glomerulonephritis](#), which may require treatment with
 - [prednisone](#) (Prednisone Intenso®, Sterapred®)
 - e. [systemic lupus erythematosus](#) ([CDHO Advisory](#)) with kidney involvement, which may require treatment with
 - [prednisone](#) (Prednisone Intenso®, Sterapred®).
2. Medications are used to address conditions that affect or are associated with kidney disease, such as
 - a. anemia ([CDHO Advisory](#))
 - b. hyperparathyroidism

- c. inflammation.
- 3. Medications are used for prevention of rejection of a transplanted kidney, using medications such as [cyclosporine](#) (Neoral®, Sandimmune®, Gengraf®)

Side effects of medications

Resources consulted

- [National Kidney and Urologic Diseases Information Clearinghouse: Analgesic Nephropathy Painkillers and the Kidneys](#)
1. Various over-the-counter pain-relieving medications adversely affect the kidneys, including
 - a. non-steroidal anti-inflammatory drugs, which
 - i. may cause kidney damage over a long period of time
 - ii. even in small amounts can worsen kidney function and cause kidney failure in persons with existing chronic kidney disease
 - iii. include
 1. [ibuprofen](#) (Advil®, Motrin® among others)
 2. [naproxen](#) (Aleve®, Anaprox®, Naprosyn® among others)
 3. [aspirin](#)
 - b. [acetaminophen](#), which should
 - i. not be used for children under 4 years of age
 - ii. be used only occasionally if kidney disease exists or the patient/client is at risk of developing kidney disease
 - iii. be used only under medical supervision if a medical need exists for long-term use, as with arthritis
 - c. aspirin or ibuprofen with acetaminophen, which comprise an especially harmful combination for chronic kidney disease.
 2. Patients/clients should be warned about the risks of over-the-counter pain-relieving medications.
 3. See also links above for the specific medications.

THE MEDICAL AND MEDICATIONS HISTORY

The medical and medications history-taking should

1. Focus on screening the patient/client prior to treatment decision relative to
 - a. key symptoms
 - b. medications considerations
 - c. contraindications
 - d. complications
 - e. comorbidities.
2. Explore the need for advice from the appropriate primary or specialized care provider(s).
3. Inquire about
 - a. transplantation
 - b. dialysis
 - i. hemodialysis
 - ii. peritoneal dialysis

- c. antibiotic prophylaxis
- d. the patient/client’s understanding and acceptance of the need for oral healthcare
- e. medications considerations, including over-the-counter medications, herbals and supplements
- f. problems with previous dental/dental hygiene care
- g. problems with infections generally and specifically associated with dental/dental hygiene care
- h. the patient/client’s current state of health
- i. how the patient/client’s current symptoms relate to
 - i. oral health
 - ii. health generally
 - iii. recent changes in the patient/client’s condition.

IDENTIFYING AND CONTACTING THE MOST APPROPRIATE HEALTHCARE PROVIDER(S) FOR ADVICE

Identifying and contacting the most appropriate healthcare provider(s) from whom to obtain medical or other advice pertinent to a particular patient/client

1. Record the name of the physician/primary care provider most closely associated with the patient/client’s healthcare, and the telephone number.
2. Obtain from the patient/client or parent/guardian written, informed consent to contact the identified physician/primary healthcare provider.
3. Use a consent/medical consultation form, and be prepared to fax the form to the provider.
4. Include on the form a standardized statement of the Procedures proposed, with a request for advice on proceeding or not at the particular time, and any precautions to be observed.

UNDERSTANDING AND TAKING APPROPRIATE PRECAUTIONS

Infection control

Dental hygienists are required to keep their practices current with infection control policies and procedures, especially in relation to

1. The [Recommendations](#) published by the Centers for Disease Control and Prevention.
2. Relevant occupational health and safety legislative requirements.
3. Relevant public health legislative requirements.
4. Best practices or other protocols specific to the medical condition of the patient/client.

DECIDING WHEN AND WHEN NOT TO INITIATE THE PROCEDURES PROPOSED

The dental hygienist

1. Is required to consult with the appropriate primary or specialist care provider(s) before implementing the Procedures if the
 - a. kidney disease or kidney failure
 - i. has been, is currently, or is soon to be treated with transplantation and immunosuppression

- ii. is treated with dialysis
 - iii. requires antibiotic prophylaxis
 - b. dental hygienist has not received sufficient information about the medical condition or treatment
 - c. patient/client has recently changed medications, under medical advice or otherwise
 - d. patient/client has recently experienced changes in his/her medical condition
- 2. May postpone the Procedures pending medical advice, which is likely to be required if the patient/client has
 - a. symptoms or signs of exacerbation of the medical condition
 - b. comorbidity, complication or an associated condition of kidney disease and kidney failure
 - c. not recently or ever sought and received medical advice relative to oral healthcare procedures
 - d. deep concerns about any aspect of his or her medical condition.

DEALING WITH ANY ADVERSE EVENTS ARISING DURING THE PROCEDURES

Dental hygienists are required to initiate emergency protocols as required by the College of Dental Hygienists of Ontario’s [Standards of Practice](#), and as appropriate for the condition of the patient/client.

First-aid provisions and responses as required for current certification in first aid.

RECORD KEEPING

Subject to [Ontario Regulation 9/08](#) Part III.1, *Records*, in particular S 12.1 (1) and (2)

For a patient/client with a history of kidney disease or kidney failure, the dental hygienist should specifically record

1. A summary of the medical and medications history.
2. Any advice received from the physician/primary care provider relative to the patient/client’s condition.
3. The decision made by the dental hygienist, with reasons.
4. Compliance with the precautions required.
5. All Procedure(s) used.
6. Any advice given to the patient/client.

ADVISING THE PATIENT/CLIENT

The patient/client is urged to alert any healthcare professional who proposes any intervention or test that he or she has a history of kidney disease or kidney failure.

As appropriate, discuss

1. The importance of the patient/client’s
 - a. self-checking the mouth regularly for suspicious signs or symptoms
 - b. reporting to the appropriate healthcare provider any changes in the mouth indicative of suspicious lesions.
2. The need for regular oral health examinations and preventive oral healthcare.
3. Oral self-care including information about

- a. choice of toothpaste
- b. tooth-brushing techniques and related devices
- c. dental flossing
- d. mouth rinses
- e. management of a [xerostomia](#).
4. The importance of an appropriate diet in the maintenance of oral health.
5. For persons at an advanced stage of a disease or debilitation
 - a. regimens for oral hygiene as a component of [supportive care](#) and [palliative care](#)
 - b. the role of the family caregiver, with emphasis on maintaining an infection-free environment through hand-washing and, if appropriate, wearing gloves
 - c. scheduling and duration of appointments to minimize stress and fatigue.
6. Comfort level while reclining, and stress and anxiety related to the Procedures.
7. Medication side effects such as [xerostomia](#), and recommend treatment.
8. [Mouth ulcers](#) and other conditions of the mouth relating to kidney disease and kidney failure, comorbidities, complications or associated conditions, medications or diet.
9. Pain management, emphasizing warnings about certain over-the-counter pain-relief medications.

BENEFITS/HARMS OF IMPLEMENTING THE RECOMMENDATIONS

POTENTIAL BENEFITS

1. Promoting health through oral hygiene for persons who have kidney disease or kidney failure.
2. Reducing the adverse effects, such as inappropriate use of pain medication or stress in a person who is debilitated by kidney disease or kidney failure, by
 - a. detailed inquiry about medications and, in particular, pain medications
 - b. generally increasing the comfort level of persons in the course of dental hygiene interventions
 - c. using appropriate techniques of communication
 - d. providing advice on scheduling and duration of appointments.
3. Reducing the risk that oral healthcare needs are unmet.

POTENTIAL HARMS

1. Causing serious mouth problems in transplantation patients.
2. Performing the Procedures at an inappropriate time, such as
 - a. when the patient/client’s history pertaining to kidney disease or kidney failure is insufficiently clear to the dental hygienist
 - b. in the presence of complications for which prior medical advice is required
 - c. in the presence of acute oral infection without prior medical advice.
3. Disturbing the normal dietary and medications routine of a person with kidney disease or kidney failure.
4. Inappropriate management of pain or medication.

CONTRAINDICATIONS	
CONTRAINDICATIONS IN REGULATIONS	
Identified in the Dental Hygiene Act, 1991 – O. Reg. 218/94 Part III	
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COMPOSITION OF GROUP THAT AUTHORED THE ADVISORY	
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