Disease/Medical Condition

CROHN’S DISEASE

(also referred to as “CD”, “ileitis”, “terminal ileitis”, “regional ileitis”, “regional enteritis”, “granulomatous ileitis/enteritis/colitis” and “inflammatory bowel disease” [IBD]; IBD is an umbrella term that also includes ulcerative colitis and indeterminate/undifferentiated IBD)

Date of Publication: June 14, 2013

Is the initiation of non-invasive dental hygiene procedures* contra-indicated?  No

- Is medical consult advised? No (assuming patient/client is already under medical care for Crohn’s disease)

Is the initiation of invasive dental hygiene procedures contra-indicated?**  Possibly, but not typically

- Is medical consult advised? Possibly (depends on severity and level of control of the disease, including the presence/absence of oral lesions)
- Is medical clearance required? Possibly (e.g., if the disease is unstable and/or there are active oral lesions). Also, medical clearance may be required if patient/client is being treated with medications associated with immunosuppression +/- increased risk of infection (e.g., corticosteroids [e.g., prednisone], azathioprine, 6-mercaptopurine, methotrexate, biologic response modifier drugs [i.e., anti-tumor necrosis factor drugs – anti-TNFs – such as infliximab and adalimumab], etc.)
- Is antibiotic prophylaxis required? No, not typically (although extended use of corticosteroids may warrant consideration of antibiotic prophylaxis)
- Is postponing treatment advised? Possibly, but not typically (depends on severity and level of control of the disease, including presence/absence of oral lesions, as well as medical clearance for patients/clients on medications associated with immunosuppression)

Oral management implications

- The patient/client with inflammatory bowel disease should be evaluated to determine the severity and level of control of the disease, as well as the types of medications being used. Patients/clients with non-obstructive CD who have fewer than four bowel movements per day with little or no blood, no fever and few symptoms (coupled, when available, with an erythrocyte sedimentation rate – ESR – below 20 mm/hour, ESR being a blood test that is a non-specific indicator of inflammation) are considered to have mild disease, and typically can receive dental hygiene care. Patients/clients with moderate to severe disease (the latter defined as six or more bowel movements per day with blood, fever, anemia and an ESR greater than 30 mm/hour) are potentially poor candidates for invasive dental hygiene care, and they should be referred for medical care and clearance.
- Patients/clients with CD often take anti-inflammatory medications, corticosteroids and immunomodulators, which can impact oral care (see above and below). However, aspirin and most other non-steroidal anti-inflammatory drugs (NSAIDs) are to be avoided, as they tend to worsen gastrointestinal tract signs and symptoms. Acetaminophen can be used as an alternative for pain control.
- Chronic and/or high dose use of corticosteroids by patients/clients with IBD can lead to suppression of adrenal function and reduce the ability to withstand stress.
- The use of immunosuppressants (i.e., azathioprine and 6-mercaptopurine) is associated with the development of pancytopenia (reduced number of red and white blood cells, as well as platelets) in approximately 5% of treated persons. This may lead to increased bleeding time and risk of infection. Presence of fever without an obvious cause in this select population should prompt expedited referral to a physician.

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Oral management implications (cont’d)

- The severity and progression of IBD are highly variable and can impact routine professional oral care. Most patients/clients experience intermittent flare-ups, with reduced signs and symptoms (or none) between acute attacks. Only urgent oral care is advised during acute exacerbations of gastrointestinal disease.
- Elective professional oral care should be scheduled during periods of remission when complications are absent. Flexibility in the scheduling of appointments may be required given the unpredictable nature of the disease.

Oral manifestations

- 5 to 10% of persons with Crohn’s disease experience intermittent aphthous-like lesions in the mouth. In contradistinction to aphthous ulcers that occur in the general population (which usually occur one at a time, last a few days, and then go away), the aphthous-like lesions in patients/clients with CD tend to occur in clusters, may be unusually large, and may persist for many days, even several weeks. The oral lesions usually erupt during flare-ups of the bowel disease.
- In addition to aphthous-like oral lesions, up to 20% of patients/clients with CD develop mouth or throat ulcerations that resemble Crohn’s ulcers in the bowel. These lesions may precede the diagnosis of gastrointestinal disease by several years, and hence vigilance and a degree of suspicion by oral health professionals may lead to earlier diagnosis of CD than would otherwise be the case. Biopsies of these oral ulcers demonstrate microscopic changes (i.e., granulomas) typical of Crohn’s disease. Features include atypical mucosal ulcerations and diffuse swelling of the cheeks and lips (orofacial granulomatosis). The oral lesions appear as linear mucosal ulcers with hyperplastic margins or papulonodular (“cobblestone”) proliferations of the mucosa, especially in the buccal vestibule and on the soft palate.
- Oral lesions of CD are typically persistent, and remit and relapse over the years. The flare-ups of ulcerating oral lesions usually self-resolve over a few weeks, although topical corticosteroids, or even intralesional injections, may be needed to help effect resolution in some patients/clients; response to systemic therapy is highly variable. Similar to the aphthous-like lesions and oral lesions associated with ulcerative colitis, the CD oral ulcers tend to become symptomatic when gastrointestinal disease is active and resolve when the GI state is medically controlled. However, in some persons the oral lesions may not necessarily parallel the activity of the intestinal disease. As well, some oral changes may be due to systemic alterations secondary to GI disease, such as those related to malabsorption in the case of extensive small bowel involvement.
- Patients/clients with symptomatic Crohn’s disease tend to have more gum infections and dental caries than persons who are asymptomatic. Dietary differences may contribute to this, for some patients/clients with CD eat large amounts of refined sugars to replace energy lost by avoidance of other foods.
- As is the case with bowel manifestations, the clinical distinctions between the oral manifestations of CD and ulcerative colitis may be blurred with overlapping clinical features. Nonspecific clinical changes such as dry mouth (xerostomia), bad breath (halitosis), and gastric reflux may be seen.
- As with other autoimmune diseases, compromise of the immune system (be it from the disease or the treatment) elevates the risk of periodontal disease.
- Corticosteroid treatment of CD can result in osteopenia, which may involve the alveolar bone. The use of corticosteroids (such as prednisone) can also lead to oral candidiasis and other oral infections as a result of immunosuppression.

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Oral manifestations (cont’d)

■ Methotrexate, sometimes used in the treatment of CD, can cause mouth sores, in addition to sore throat.

■ Biologic response modifier drugs, such as anti-tumour necrosis factor drugs (e.g., infliximab and adalimumab), can cause sore throat and nasal congestion.

Related signs and symptoms

■ Crohn’s disease is a chronic autoimmune disease that causes the gastrointestinal (GI) tract to become inflamed and ulcerated. Signs and symptoms, which tend to relapse and remit over time, include persistent diarrhea (loose, watery, and frequent bowel movements), abdominal cramping and pain, fever, and sometimes rectal bleeding.

■ In contrast to ulcerative colitis (the other major form of inflammatory bowel disease), CD can occur anywhere in the GI tract (“gum to bum”, although most commonly in the end of the small bowel and beginning of the large bowel), involves the full thickness of the bowel wall, and is patchy in nature (so-called “skip lesions”, where normal bowel is interspersed between patches of inflamed bowel).

■ The usual age at onset is 15−30 years, although CD may begin at any age. Prevalence of inflammatory bowel disease in Canada is 0.7%, meaning that more than 233,000 Canadians live with IBD (slightly more with CD than ulcerative colitis).

■ Complications of CD are more frequent than in ulcerative colitis. Complications include blockage of the intestine due to swelling and scar tissue; formation of abscesses; occurrence of anal fissures; and development of deep ulcers that turn into tracts known as fistulas. (A fistula is an abnormal connection between two hollow structures, such as two segments of the intestine or a segment of intestine and the bladder, or between a hollow structure – such as the intestine – and the skin surface.) Fistulas often become infected. Patients/clients with severe or longstanding disease may also experience deficiencies of proteins, calories, and vitamins. Crohn’s disease of the lower intestinal tract elevates the risk of colorectal cancer.

■ There is no definitive cure for Crohn’s disease. While there are a variety of medications for symptom control, the majority of patients/clients with CD will undergo surgical resection of diseased bowel and/or surgery for related CD complications, often repeatedly. Unfortunately, the granulomatous ulcerations can recur in previously healthy bowel. Surgery may involve either a temporary or permanent ostomy (i.e., the creation of an opening between the remaining bowel and the body surface, using an external appliance to store fecal waste).

■ CD can also involve parts of the body other than the gastrointestinal tract, including the joints, eyes, skin, and liver. Fatigue is also a common feature. Children with CD may fail to develop or grow properly.

■ Patients/clients with IBD have elevated rates of anxiety and depression. They often require emotional support and physical rest throughout the course of their disease, particularly during flare-ups.

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References and sources of more detailed information

- Crohn’s and Colitis Foundation of Canada  http://www.ccfc.ca
- US Centers for Disease Control and Prevention  http://www.cdc.gov/ibd/
- Canadian Journal of Gastroenterology  http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2657699/
- The Impact of Inflammatory Bowel Disease in Canada: 2012 Final Report and Recommendations. Toronto: Crohn’s and Colitis Foundation of Canada; 2012.

* Includes oral hygiene instruction, fitting a mouth guard, taking an impression, etc.

** Ontario Regulation 501/07 made under Dental Hygiene Act, 1991. Invasive dental hygiene procedures are scaling teeth and root planing, including curetting surrounding tissue.

Date: June 8, 2013