BRIGHAM AND WOMEN'S HOSPITAL

Oral Chronic Graft-Versus-Host Disease

What is oral chronic graft-versus-host disease?

Chronic graft-versus-host disease (cGVHD) is a frequent complication following bone marrow transplantation from a non-relative. . The skin, liver, and gastrointestinal tract (including the mouth) are the most commonly affected parts of the body. Some degree of cGVHD is likely a good thing as it is a sign of successful engraftment and may help keep the underlying disease under control. Oral cGVHD is very common and in some cases, the mouth may be the only area affected. Similar to the other body organs, oral cGVHD is variable and may range from not being painful at all, to being so painful as to make it difficult to eat and speak.

Several forms of oral cGVHD have been recognized:

1) The most common form is the *reticular* form that looks like lacey white lines – usually on the inner cheek or the sides or top of the tongue. These are usually not painful and may have been there for a long time before your attention is drawn to it.
2) A second form is the *erosive* form. These look like raw, scraped, red areas and are often painful and sore, particularly when food comes into contact with it. Even so, faint subtle white lines may be seen at the periphery of the red areas.
3) A third form is the *ulcerative* type. This form probably overlaps with the erosive form and is generally painful. These sores may look like canker sores and can be quite large.

Oral cGVHD may also affect the salivary glands and cause dry mouth and/or small blisters (mucous cysts) to form on the inside of the lips and the palate. In patients who develop thickening and hardening of the skin, the same process may affect the skin of the face and in some cases the soft tissues inside of the mouth. When this happens the mouth may feel "tight" and it may be difficult to open wide.

What causes oral cGVHD?

Depending on how well "matched" your donor was (even if he/she were a family member), there are invariably many ways in which the donor immune system recognizes aspects of your body as "foreign" and mounts an immune attack. While oral cGVHD is seen to a greater degree in poorly matched transplants, it can still develop even in ideally matched situations. Oral cGVHD is **not** infectious in nature. You **cannot** spread it to family members and friends.

How do we know it is oral cGVHD?

Usually your oncologist or oral medicine specialist can diagnose oral cGVHD just by looking at its appearance, by observing the location of lesions, and by taking a good history. This is particular true when the reticular type is present. In some circumstances, however, a biopsy may be necessary.

What to expect

Oral cGVHD tends to come and go. Some days it will feel better, and other days it may feel worse. It tends to get worse if your body is stressed, both physically (such as having a cold) and emotionally. It will probably be best to avoid spicy and acidic foods as they will generally aggravate your mouth; however there are no specific foods that will actually make the condition get worse. As far as we know, oral cGVHD can persist for many years although it tends to burn out after the first couple of years. If you have a dry mouth, this may further exacerbate the condition.

Treatment

There is no cure for oral cGVHD, however, we can treat the condition if it is painful and help it to settle down. This is done by applying an anti-inflammatory agent, such as a steroid, to it. The most effective one is fluocinonide gel (one brand of which is Lidex). Other steroid preparations are also available in the form of stronger gels (such as clobetasol gel), or even a steroid rinse (such as dexamethasone). If you are given a steroid preparation, please be aware that you may develop a yeast infection in your mouth when you use the steroid. Your doctor may prescribe an anti-yeast (anti-fungal) rinse (such as nystatin), troche (such as clotrimazole) or pill (such as fluconazole) to treat the yeast infection. Your doctor may also prescribe a topical anesthetic such as viscous lidocaine or "magic mouthwash" for pain control. A new non-steroidal anti-inflammatory ointment called Protopic may also work for you.

When you are first diagnosed with symptomatic oral cGVHD, you will use the steroid gel or rinse two or three times a day for several weeks. **You may notice on the packaging of the steroid that it reads "Not for internal use" or "For external use only". Such topical steroids have been used for years to treat oral cGVHD effectively. The warning is there because those steroids were not originally tested for treating cGVHD.**

After cleaning your mouth, dry the area with some cotton gauze, place a small amount of gel on a clean finger, and dab it onto the area of cGVHD that hurts, and then do not eat or drink for 30 minutes for the steroid to be absorbed. It will not hurt you to swallow some of this steroid. After it has been brought under control, you may treat flare-ups by using the gel two or three times a day for up to one week. It is a good idea to let your mouth rest rather than use the steroid continuously when you are not experiencing pain.

If your mouth feels dry, the first thing to do is avoid caffeinated and alcoholic beverages, then be sure to drink plenty of water throughout the day. There are specific "dry mouth" products that are available over the counter that may help relieve the symptoms to some degree. Many patients are happy with the Biotene™ line of products, and these can be used as often as you like. In more severe cases, certain medications such as Salagen™ and Evoxac™ may be prescribed to actually help stimulate the salivary glands to produce more saliva. Use of a home fluoride gel is essential to prevent dental caries.

Oral cGVHD and oral cancer

Patients with cGVHD are at an increased risk for developing oral cancer and should therefore be evaluated at least twice a year. Oral cGVHD can look similar to early oral cancer lesions so it will be best to be seen by a specialist that is familiar with oral cGVHD, such as here at Brigham and Women's Hospital. Periodic biopsies of suspicious lesions may be necessary.