Reconstruction for Cancer of the Oral Cavity

Joshua E. Lubek, M.D., D.D.S., F.A.C.S.

Oral cavity cancer management very often involves multimodality therapy to include surgery and radiotherapy (with concurrent chemotherapy). Initial surgery can leave defects that may require immediate reconstruction to allow for speech and swallow function while radiation therapy can result in significant side effects from trismus (limited mouth opening) and osteoradionecrosis (jaw bone death as a result of radiation). The goal of reconstruction of the oral cavity and jaws is to provide return of function regarding speech and swallowing with attention to esthetic concerns to provide significant improvement in a patient’s quality of life. Although this article will focus on reconstruction within the oral cavity, many of the described techniques can be applied to other areas within the head and neck as well.

There are numerous methods available to the surgeon to reconstruct defects of the oral cavity with selection based upon factors to include size of defect, location within the oral cavity, communication with the neck resulting in a salivary leak that can lead to infection, patient health/co-morbidities and patient desires. The ideal reconstruction will provide return of function (ie. restore the facial profile, jaw and teeth), minimize scarring with the least number of procedures necessary. Based upon this principle the best procedure may not be the simplest, though it may eventually result in an overall reduction in operative time, hospital stay and recovery time, if it does not achieve the desired reconstructive result. One must also understand that reconstruction and rehabilitation is a team effort requiring the skills of the reconstructive surgeon, maxillofacial prosthodontist/dentist, speech and language pathologist, nutritionist, physical therapist and the patient.

Choice of reconstructive method for repair of defects of the oral cavity can be thought of as a ladder of increasing complexity and operative time grouped into 4 general categories to include: 1. primary closure/secondary healing, 2. skin grafts and local flaps, 3. regional flaps and 4. distant flaps (microvascular free tissue transfer). It is important to remember that often more than one correct method that will achieve the desired reconstructive goals as described previously.

Primary closure is a method in which the defect is closed by simple sutting techniques. An example would include a small tongue cancer defect that does not result in any tongue tethering that will restrict significant movement for speech and swallowing. Secondary healing is a technique in which the wound is left open to heal. Specialized healing tissue (granulation tissue) ultimately gets covered over by newly formed oral mucosa (specialized lining of the mouth). These techniques are quickly accomplished however, healing by secondary intention may result in increased pain due to the open wound. Often the patient will be prescribed mouth rinses that both provide comfort and antibacterial control during healing.

Skin grafts can be harvested both from the patient (autograft) or from animal or human donor tissue (allograft). They serve as a biologic membrane of variable thickness to cover a healing surface. The ability for the skin graft to survive is dependent on the surrounding tissue for its blood supply and pre-existing scar tissue or previous radiation can cause the graft to not adhere to the defect site. This is generally not a huge concern as it acts as a biologic (natural) bandage shielding the wound while it heals secondarily or from the periphery. Skin grafts will contract more significantly than vascularized flaps and are thus not good for large defects or those requiring thickness of tissue. Immobilization of the skin graft during healing is essential and thus the graft is sutured tightly to the defect site often with a bolster dressing (bandage) sutured over top to maintain pressure. This can be cumbersome to the patient both during speech and eating when placed intra-orally.

Flaps are vascularized tissue (tissue with a blood supply) that are designed via specialized surgical techniques either using local tissue (adjacent the tumor and within the oral cavity), regionally (ie. from within the head/neck/chest) or distantly (detached donor site tissue from another part of the body that is “transplanted” to the oral cavity). These flaps have the advantages of transferring their own blood supply allowing for larger amounts of more bulky tissue to fill defects and voids within the oral cavity.

Local flaps from within the oral cavity are often based upon more random blood patterns but have the advantage that they retain specialized oral mucosa designed to function within the
RECONSTRUCTION continued from page 1

oral cavity. Patients generally recover quickly from their surgeries and do not require donor sites from outside the oral cavity. They are generally reserved for smaller size defects and disadvantages include their inability to be utilized in large tumors or in cases of previous radiation or scar. These flaps are ideal for lip reconstruction as they address both the cosmetic and functional components by re-arranging the existing perioral lip musculature to maintain lip competency and function. Both the facial artery myomucosal (FAMM) flap and the palatal island rotational flap (tissue from the roof of the mouth) are examples of local flaps, based upon a reliable named blood vessel supply within the oral cavity and can be used to reconstruct various intraoral defects. As an example, the palatal island flap can be used to close communications between the nose and mouth following tumor removal. Donor sites within the oral cavity are often either primarily closed or left to granulate without sutures (secondary healing).

Regional flaps involve the rotational transfer from adjacent tissue often within the neck or chest while maintaining a pedicled (non-detached named artery and associated vein) blood supply to allow the flap to survive. Considered one of the “workhorse” flaps, the pectoralis major flap, uses the muscle of the front chest wall and its overlying skin to often reconstruct defects of the tongue or floor of mouth. The flap does have a maximum arc of rotation which limits its ability to reach every defect within the oral cavity. The pectoralis flap can be quite bulky as well which can be both an advantage or disadvantage, depending on the defect needing reconstruction. It can be used in conjunction with a titanium reconstruction bar or a bone graft to rebuild the lower jaw (mandible) however with the development of microvascular free tissue transfer it is rarely used for mandibular “bone” reconstruction. Donor site function of the shoulder and arm is very good following this flap use, however the scar can be quite noticeable. There are modified techniques to hide the skin harvested from beneath the breast tissue and allow for improved cosmetic scars in women. Other regional flaps commonly used for oral cavity reconstruction include the submental island flap (skin from underneath the chin) based upon the facial artery which can be incorporated into the neck lymph node dissection surgery with a very nice cosmetic result; or the supraclavicular flap which rotates skin from the shoulder region above the collar bone.

Microvascular free tissue transfer (free flaps) have dramatically improved the quality of life for patients undergoing treatment of oral cancer by allowing for reconstruction of large complex extirpative defects as a result of the initial treatment; or as a result of various treatment sequelae (i.e. osteoradionecrosis of the jaw) once thought to not be able to be consistently reconstructed with good functional and cosmetic results. As previously described, free tissue transfer involves the technique of harvesting one’s own tissue along with its blood supply (an artery and a vein) at a distant site (i.e. the leg) and transferring it to the oral cavity to reconstruct the tumor defect. Tissue that can be transferred can be of a single type (ie. skin) or include a composite of tissue such as a skin/muscle/bone flap (osteomucocutaneous) to replace multiple tissue types. The choice of flap donor site selection will be based upon numerous factors to include surgeon-patient preference, donor site morbidity/availability, defect size, donor blood vessel length/diameter and patient body form or habitus.

RECONSTRUCTION continued on page 3
The term “microvascular” originates from the technique by which the surgeon utilizes either loupe magnification (specialized eyeglasses) or a microscope to suture (anastomose) the flap blood vessels to recipient blood vessels within the neck. Although these techniques increase the duration of both the anesthesia-operative time and hospitalization they are used routinely, especially in higher volume surgical head and neck cancer departments. The highly successful and predictable reconstructive outcomes stem from the improvements in surgical techniques/training, finely machined microvascular equipment and tedious post-operative monitoring of the blood flow within these flaps. Early signs of vascular compromise (blockage of blood flow at the anastomosis), will require prompt return to the operative setting to salvage the microvascular free flap.

Two of the most utilized soft tissue only free flaps for oral cavity reconstruction include the forearm free flap (tissue from the wrist area) or the thigh flap. Advantages of both these flaps include their reliable blood supply, pliable tissue for draping into complex defects, minimal donor site morbidity and ability for a two-team approach (the reconstructive surgeon can harvest at the same time as the extirpative surgeon is removing the tumor, decreasing operative time). The thigh flap can be thicker in certain patients and is often reserved for larger soft tissue defects (ie. removal of greater than half of the tongue). Advantages of the thigh flap include less donor site morbidity compared to the forearm with the avoidance of skin grafts to cover donor site defects and temporary hand immobilization during the early post-operative healing phase.

Reconstruction of the bone within the maxilla and mandible (upper and lower jaw) has dramatically improved with microvascular free flaps. Along with the use of computer planning and 3D printed models, accurate design and reconstruction of composite oral jaw defects can be re-established. Ultimately bone can be placed in proper position to allow for possibilities of dental rehabilitation. The most common bone flaps for maxillomandibular reconstruction include the fibula (leg), iliac crest (hip) and the scapula (shoulder blade). All of these bone flaps can include their overlying skin and muscle as a composite flap, to not only reconstruct the jaw bone but also the specialized oral mucosa simultaneously. The fibula donor site is the most commonly selected due to its ability for a two-team harvest, good bone quality and minimal donor site morbidity. The iliac crest is considered to have the best bone quality for dental rehabilitation due to its thickness and height however some consider such to have more donor site morbidity due to prolonged gait disturbances and the need to repair the created hernia that occurs during flap harvest. This author along with many others have found the iliac crest to be an excellent donor site with similar morbidities to the other selected flaps. The incision along the groin region is more esthetic than the fibula and often preferred among female patients. The scapula bone can provide good infrastructure bone to recreate the maxilla and mandible but the more fatty soft tissue and porous nature of the bone can make it more difficult to place dental implants afterward. Shoulder function is very well preserved and this flap offers the advantage of use in patients with significant peripheral vascular disease making the fibula bone unusable. Disadvantages of the scapula bone include the inability to harvest the flap simultaneously as the extirpative tumor resection surgery.

Dental implant rehabilitation is an important component of the final phases of patient recovery and return to normal life after cancer therapy. One must remember that although the dental implants placed into the free flap bone are the same as those used to replace teeth lost due to common conditions (periodontal disease), the reconstructed tissue is not the same. The tissue used to replace the gingiva (gum tissue) is either skin or muscle never created to be within the oral cavity; this is further complicated by the fact that often patients have received adjuvant or postoperative radiotherapy. Dental implants require the strictest of oral hygiene and tough keratinized gingiva (specialized gum tissue normally around the teeth) to surround the implant to allow for the most optimal conditions to prevent oral bacteria from causing infection around the implant (peri-implantitis) and ultimate loss of the dental implant. Minimum time from placement of an implant to allow bone integration is at least 3 months. A team approach with the implant surgeon and the maxillofacial prosthodontist is needed to allow for: design of the optimal implant placement, frequent laser removal of hyperplastic (excessive inflamed neo-gingival tissue) and routine dental recall for best oral hygiene. One can never forget that routine tumor surveillance is required and this hyperplastic tissue can mimic tumor recurrence. Although there are medical reasons that some patients may not be acceptable candidates for dental implants a number of patients may not undergo this form of dental reconstruction due to the significant financial cost of implant retained dentures that is rarely covered under medical insurance. This author’s advice after seeing patients struggle with this issue, is that despite assisting patients via writing letters of medical necessity; it is the persistence by patients and their families in writing and speaking with their insurance companies explaining as to the essential non-cosmetic and functional reason for dental rehabilitation that helps to provide insurance coverage for their implant reconstruction and denture rehabilitation.

A discussion regarding oral cavity reconstruction would not be complete without mention of the specialized denture (obturators) that can used to reconstruct defects of the upper jaw. In certain scenarios, the obturator can simultaneously seal off the mouth from the nose preventing food and liquid from entering the nose upon eating as well as strengthening speech by preventing hypernasality when speaking. The obturator has the advantage of providing immediate rehabilitation without a donor site morbidity, decreased hospital stay and immediate dental rehabilitation. Disadvantages include its cumbersome nature, need for close recall with the maxillofacial prosthetist as it requires numerous adjustments for improved fit and can be difficult to place in the mouth especially with limited patient mouth opening (trismus) following surgery and radiation.

Advances in head and neck reconstruction continue to improve the quality of life for patients having undergone oral-head and neck cancer therapy. Ongoing research includes the use of better bone substitutes, tissue engineering, computer planning, 3D printing, surgical flap techniques and dental implant research. The reconstructive goal we strive for is to restore the oral, head and neck function.
We Have Walked In Your Shoes: A Guide to Living With Oral, Head and Neck Cancer  
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HEAD AND NECK CANCER NEWS  
Debt, disfigurement place survivors of these types of cancer at higher risk of suicide  
Studies show cancer survivors are twice as likely to die by suicide than the general population. But some cancer survivors are at a greater risk than others, according to research from a St. Louis University doctor.  
A study appearing in this month’s journal Cancer has found patients in recovery from pancreatic or head and neck cancers die by suicide at a higher rate than other common cancers. In the case of head and neck cancer, the suicide rate is 63 for every 100,000 people — close to four times that of the general population and two times that of other cancer survivors combined.  
The findings emphasize a little-talked about subject: the mental health needs of patients after they finish treatment, said Nosayaba Osazuwa-Peters, an assistant professor of otolaryngology at SLU and lead author of the study.  
“To imagine that the problem [of suicide] is even more serious among people who we celebrate as survivors, that’s what made the study more profound to me,” he said. “They expect you to be happy, but people may not really understand how you’re feeling inside because the treatment is very toxic.”  
Head and neck cancer survivors often carry visible evidence of their illness and its treatment on their faces. Many survivors have difficulty eating, drinking or speaking or live with permanent facial disfigurement.  
“We take it for granted, but for a head and neck cancer patient who has had their jaw removed, just a simple sharing of a meal with friends becomes a problem,” Osazuwa-Peters said.  
Disfigurement can make other people nervous around cancer survivors, which can lead to more isolation, said Joe Lapides, president of HNC Support International, a California-based nonprofit advocacy and support group for head and neck cancer survivors, patients and their caregivers.  
“They call this cancer the cancer of the lonely,” Lapides said. “The other cancers you can’t always see. Prostate cancer, you don’t know. There’s not physical evidence. This cancer, there’s more physical evidence, that makes people withdraw.”  
Many cancer patients carry massive amounts of medical debt, which can make depression among survivors worse. The cost of treating head and neck cancer can be close to $80,000 during the first year after diagnosis. Half of head and neck cancer survivors cannot return to work after the cancer renders them functionally disabled, causing further financial strain.  
Ultimately, community and connection is vital for survivors, advocates said. For example, patients who were married were less likely to die by suicide, most likely due to a spouse’s emotional support, Osazuwa-Peters said.  
That support is easier to find for some cancer survivors than others, Lapides said. “Breast cancer, lung cancer, prostate, they’re obviously more prominent,” Lapides said. “We call them the popular cancers. A lot of people don’t know what head and neck cancer is.”  
People are finding groups such as HNC International and other national groups through the internet. Lapides says several other support groups have been established since he was diagnosed more than six years ago.  
“More than any other cancer, it’s important for these particular cancer patients to find support with peers,” said Mary Ann Caputo, Executive Director of New York-based Support for People With Oral and Head and Neck Cancer.  
Other survivors can give advice on how to cope with a changed body and social life. “The support network is vital because they know what they’re going through,” Caputo said. “It’s long-term. With head and neck cancer patients and survivors, it’s important they find the support they need through other people who have traveled this journey before.”  
~ Sarah Fentem  
Health Reporter, St. Louis Public Radio  

~ Geri W.
Gratitude...At Thanksgiving and Always

Thoughts from Chaplain Alan Wright, Co-Facilitator, SPOHNC Baylor, TX Chapter

If you think of a perfect Thanksgiving scene you might conjure up the famous Norman Rockwell painting where grandma is just setting down a massive turkey as grandpa stands at the head of the table with eyes focused on the bird. Around the dinner table are cousins, aunts, brothers, and sisters.

In my opinion, however, there’s another Rockwell painting that better sums up the spirit of Thanksgiving. It’s a war-time painting of a handsome soldier who is home for the holidays. He sits on the front porch peeling potatoes with whom I assume is his mother. She’s staring at him with great admiration. The look on her face suggests that she can’t believe that he’s back home. She’s thankful for his safe return. The soldier, still dressed in his uniform, sits in a chair in a way that his knees are tucked up under the chair. He leans over and enthusiastically peels his potato. The grin gives him away. He is thoroughly enjoying the peeling process that he surely performed numerous times as a child. The task, perhaps once laborious, is now a joy.

I imagine this young soldier has seen it all...the good and the bad. His perspective about everything is different than when he first left home. Perspective can make us grateful even for the little things. Many times, it takes a major life-event for us to realize where our gratitude lies. You are called to war or maybe your physician informs you that you have cancer. It’s normal, I suppose, that when we are shaken we are quickly reminded of the worth of all we once took for granted.

I would never tell a cancer survivor how they should feel. I wouldn’t blame those who have found a good bit of bitterness and disappointment in their life after the diagnosis. Yet, I only report what cancer survivors tell me. Even those oral cancer survivors for whom a Thanksgiving meal is impossible, have found other reasons to be thankful. It’s by no means an easy journey and I have no advice on how one gets there. I do see it, however. With my own eyes, I see people gain a new perspective that leads to gratitude even if it’s thimbles full and not barrels full.

If I had to guess, it might start with a spirit of openness to the change that has already begun. The openness often leads to a new perspective, though hard-earned. The new perspective provides new eyes into a post-diagnosis world. Somewhere in the newness and even among the scars there might be discoverable source, no matter how tiny, that feeds our gratitude.

For many of you and for more reasons than your swallowing ability, the Rockwellian picture of the perfect Thanksgiving Dinner may be unrealistic. With that in mind, may this Thanksgiving be more than a meal for you. Like the soldier in the second painting, may you find a new perspective where a spirit of thankfulness lies beneath both your losses and also all you’ve gained.

SPOHNC IS CELEBRATING YOU

There’s a lot that goes on behind the scenes at SPOHNC. As a non-profit organization, we are privileged to have a Board of Directors of very committed, highly esteemed physicians and professionals. Our Board makes decisions regarding the well-being of SPOHNC, and also meets several times a year to share ideas and information helpful to SPOHNC and the patients, survivors and families we serve. We are honored to have such an amazing group of individuals watching over our SPOHNC family.

One such gentleman is our newest Board member, highly esteemed head and neck cancer physician, Eugene Myers, MD, FACS, FRCS, Edin (Hon). Dr. Myers is an asset to SPOHNC. He is kind, caring, compassionate and always “on board” for the best interest of SPOHNC.

Dr. Myers will celebrate a birthday on November 27th! Whatever you’re doing for your special day, SPOHNC wishes you well. Relax, enjoy, have fun and celebrate!

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HEAD AND NECK CANCER NEWS

No De-escalation of Therapy for HPV+ Throat Cancer

October 26, 2018 - MUNICH — Another trial has shown that de-escalating therapy does not work in patients with good prognosis human papillomavirus-positive (HPV+) oropharyngeal squamous cell carcinoma or throat cancers.

Results from the De-ESCALaTE HPV study show that using the targeted drug cetuximab with radiotherapy does not improve side effects and, more importantly, has worse survival compared with the standard of care — chemotherapy with cisplatin and radiotherapy.

The finding echoes the results from the US National Cancer Institute’s Radiation Therapy Oncology Group (RTOG) 1016 trial, the top-line results of which were released earlier this year, and details of which were presented this week at the American Society of Radiation Oncology (ASTRO) 2018 meeting.

“Do not change your clinical practice of using cisplatin with radiotherapy in these patients,” cautioned Hisham Mehanna, MBChB, PhD, chair of head and neck surgery at the University of Birmingham, United Kingdom, and lead investigator of the De-ESCALaTe study. He presented the results during a presidential session here at the European Society for Medical Oncology (ESMO) 2018 Congress (abstract LBA9).

“Cetuximab did not cause less toxicity and resulted in worse overall survival and more cancer recurrence than cisplatin. This was a surprise — we thought it would lead to the same survival rates but better toxicity. Patients with throat cancer who are HPV+ should be given cisplatin, and not cetuximab, where possible,” Mehanna said in a statement.

Hope for Fewer Side Effects

Cetuximab with radiation is already approved by the US Food and Drug Administration for use in head and neck cancer, including oropharyngeal cancer, and is an accepted standard of care, especially for patients who cannot tolerate cisplatin. The hope behind de-escalation of therapy was that this regimen would offer similar efficacy but have fewer side effects than the standard regimen of cisplatin plus radiation.

“The side effects of treatment for patients with head and neck cancers are devastating. They experience loss of speech, loss of taste, and have trouble swallowing,” explained ESMO expert Jean-Pascal Machiels, MD, PhD, head of the department of medical oncology at the Cliniques Universitaires Saint-Luc, Brussels, Belgium.

“With HPV increasing rapidly in the Western world, HPV+ head and neck cancers are typically seen in younger patients who respond well to treatment and live for three to four decades. These patients would like to live without the toxicities associated with treatment,” he added.

“Based on a large study in 2006, many patients have been receiving cetuximab with radiotherapy on the assumption that it was as effective as chemotherapy with radiotherapy and caused fewer side effects,” Mehanna commented. That study showed that for patients with squamous cell carcinoma of the head and neck, treatment with cetuximab and high-dose radiotherapy improved locoregional control and reduced mortality. At the same time, side effects were no worse (N Engl J Med. 2006;354:567-578). However, until now there have been no head-to-head comparisons of the two treatment regimens. Now there are two trials, both showing the same results — cetuximab has inferior efficacy.

Details of the De-ESCALaTE Study

The De-ESCALaTE study randomized 334 patients with HPV+ low-risk, oropharyngeal squamous cell carcinoma to receive radiotherapy (70 Gy in 35 fractions) and either cisplatin (three doses of 100 mg/m²) or cetuximab (400 mg/m² loading dose followed by weekly 250 mg/m²). Of the randomized patients, 80% were men and 84% had stage I/II disease, while 16% had stage III disease based on the new TNM classification.

There were no differences between the cisplatin and cetuximab groups in toxicity when it was measured as: reported mean difference of overall events (5.37 vs 5.45 events per patient respectively); all grade toxicities (29.9% vs 30.9%); or grade 3-5 toxicities (4.8% for each group). However, there were significantly more serious adverse events (162 vs 95) in the cisplatin than the cetuximab group. Cetuximab did not result in less toxicity, Mehanna said. “Quality of life was the same, and trouble swallowing was the same,” Mehanna added. In addition, overall survival was significantly worse for patients receiving cetuximab compared with those on cisplatin (hazard ratio [HR], 4.99; P = .001). Two-year overall survival rates were 89.4% for those receiving cetuximab and radiotherapy, compared with 97.5% for patients receiving cisplatin and radiotherapy. There were 20 deaths in the cetuximab group and six deaths in the cisplatin group.

Local and distant recurrences were also worse: there were 29 recurrences with cetuximab and 10 recurrences with cisplatin. Incidence of loco-regional recurrence was 12% with cetuximab and radiotherapy and 3% with cisplatin and radiotherapy. For distant recurrences, the corresponding rates were 9% and 3%. The 2-year recurrence rate was also significantly higher for cetuximab compared with cisplatin (16.1% vs 6.0%; HR, 3.39; P = .0007).

In a sensitivity analysis, when the investigators removed patients with stage III disease from the mix, the results were still no different. “Cisplatin remains the standard of care in HPV+ low-risk oropharyngeal squamous cell carcinoma,” Mehanna concluded.

Commenting on the study for ESMO, Branislav Bystricky, MD, head of medical and radiation oncology at the University Hospital Trencin, Slovakia, said: “It was believed that cetuximab causes less side effects and was therefore a good option for HPV+ throat cancer patients who are young and expected to survive for several decades, as well as those less able to tolerate chemotherapy.” However, he noted, “We now have two studies showing that these patients [with low-risk throat cancers] should not be given cetuximab.”

“Future research should examine whether genotyping for the KRAS-variant can select a group of patients that will benefit from cetuximab treatment with radiotherapy.”

European Society for Medical Oncology (ESMO) 2018 Congress. Abstract LBA9.

Make a Difference. Give a Gift Today.
Golden Potato Soup (from Volume 1)

4 c. potatoes, chopped
1 c. water
½ c. celery, diced
½ c. carrot
¼ c. onion, diced
1 tsp. parsley flakes
1 chicken bouillon cube
1 tsp. Cajun seasoning (optional)
1 ½ c. milk
2 Tbsp. flour
½ to ½ lb. Velveeta cheese

In a large saucepan, combine potatoes, water, celery, carrots, onion, parsley flakes, bouillon cube and seasonings. Mix well. Cover and simmer for 15 to 20 minutes or until vegetables are tender. Gradually add milk to flour, mixing until well blended. Add milk mixture to vegetables and cook until thickened. Add cheese. Stir until melted.

Note: Salt and pepper can be used instead of Cajun seasoning. Vegetables can be cooked longer to get very soft and if needed can be mashed or pureed. Yields 4 to 6 servings.

344 calories/serving.

~ Debby O., Texas

Applesauce Cake (from Volume 1)

1 c. butter or margarine
2 c. sugar
2 tsp. cinnamon
2 tsp. cloves
2 tsp. nutmeg
2 c. applesauce
2 tsp baking soda
3 ½ c. flour
1 c. walnuts, chopped
2 c. raisins
Cherries, cut into ¼ sized pieces
2 eggs, beaten

Preheat oven to 350. In large bowl, cream butter with sugar, cinnamon, cloves and nutmeg. Add eggs and mix well. Add applesauce and continue mixing. Add baking soda and flour until well blended. Fold in fruit and nuts as desired. Bake at 350 in greased and floured Bundt pan or tube pan for 1 ¼ hours until a toothpick inserted in the center comes out clean. Let cake cool slightly then turn upside down onto a serving platter. Yields 16 servings. 414 calories/serving.

~ Janet & Frank B., North Carolina
NEWS FOR CHAPTER FACILITATORS

Interested in learning more about Immunotherapy for Oral, Head and Neck Cancer for your SPOHNC Chapter attendees? SPOHNC and Bristol-Myers Squibb are offering an unbranded presentation on the general treatment for oral, head and neck cancer with Immunotherapy including side effects. The presenters are Immunology Oncology Clinical Liaisons who have nursing degrees and experience in direct patient care.

Topics covered in the presentation include:
- Introduction to Immunology Oncology
- The Immune System and Cancer
- Possible Effects of Immunotherapy
- Practical Information on Receiving Immunotherapy

Please contact SPOHNC Chapter Administrator, RoseAnne Pagac at r.pagac@spohnc.org if you would like to set up a presentation for your SPOHNC Chapter Support group.

If you have any questions please call us at 1-800-377-0928.

Please let us know when your scheduled presentation will take place. After the presentation remember to share your thoughts for an upcoming newsletter!

HOLIDAY EATING TIPS

Well, the elections are past us...thank goodness and Thanksgiving is right around the corner. The Big Turkey Dinner can be a challenge for some of us...so here is an article on Holiday Eating Suggestions. Remember...Gravy can be your best friend when it comes to enjoying the holiday meals. A thought...be the first to start the big meal...cause you might be the last to finish.

If you’re invited to a party:
- Check with the host to see what they are serving and ask if you could bring something if there isn’t anything on the menu that you can eat.
- If you need thickened liquids, bring your own thickener and container so that you can premix your fluids prior to the party.
- Let the person giving the party know of your special needs and offer some suggestions of foods that everyone could eat or ways they could help you. For example: If you have decreased saliva production, let them know that you need extra sauces or gravies to moisten foods.

If you are having problems maintaining or keeping weight on:
- Choose dark turkey meat as it has more fat, calories and tends to be moister.
- Add margarine to vegetables. This also helps increase the moisture if you’re having problems with decreased saliva production.
- Add whipped topping made with real cream to your pumpkin or other cream type pie.
- Consider having cream soups as an appetizer as they tend to be higher in calories.
- Add cream sauces or cheese sauce to your vegetables.

If you’re having problems with taste alterations:
- White Turkey meat is blander if you have problems with stronger tasting meats.
- If you have a metallic taste when eating meats and other foods, you may need to skip the gravy.
- Experiment with different spices in seasoning your vegetables if the foods don’t have any taste. You may need to add additional seasoning to your vegetables after.

HOLIDAY EATING TIPS

shared by Jack Mitchell -
Survivor & SPOHNC Dallas, TX Chapter Facilitator

Make a Difference. Give a Gift Today.
HPV blood test shows promise for tracking head and neck cancer after treatment

23-Oct-2018 - CHAPEL HILL - A new blood test developed by University of North Carolina Lineberger Comprehensive Cancer Center researchers shows promise for tracking HPV-linked head and neck cancer patients to ensure they remain cancer-free after treatment.

Researchers presented preliminary findings at the 60th Annual Meeting of the American Society for Radiation Oncology in San Antonio on Tuesday, Oct. 23. Their study evaluated a blood test for HPV-linked oropharyngeal squamous cell carcinoma, which is a cancer of the back of the throat. The findings demonstrated the test could be an effective and less costly alternative for monitoring for cancer recurrence after radiation treatment.

“The goal of this study was to evaluate whether this test can be used to track patients who are completely asymptomatic, and thought to have no active cancer,” said UNC Lineberger’s Gaorav P. Gupta, MD, PhD, assistant professor in the UNC School of Medicine Department of Radiation Oncology.

“We already knew that our test was very sensitive and specific, but we did not know the degree to which it would be useful in early detection of disease recurrence in patients who are otherwise thought to be disease-free.”

HPV, or the human papillomavirus, is the most common cause of sexually transmitted infection in the United States, according to the U.S. Centers for Disease Control and Prevention. Infection with certain strains of HPV can cause cervical cancer in women, genital cancers in both men and women, and cancer of the oropharynx, which is the back of the throat, including the base of the tongue and tonsils. The CDC estimates that approximately 70 percent of oropharyngeal cancer cases diagnosed in the United States are probably caused by HPV, which accounts for nearly 13,000 cases per year.

Gupta and his colleagues developed a blood test that can detect fragments of HPV's genetic material that have been released into the blood by dying cancer cells.

“We realized it is important to distinguish HPV DNA that's being released by dying tumor cells from the natural HPV DNA that is present during a viral infection,” Gupta said. “Our method accomplishes this feat, thus making it a more sensitive and specific test for cancer.”

For their study, the researchers followed 89 patients with HPV-associated oropharyngeal squamous cell carcinoma who received chemotherapy and radiation treatment. They administered the blood test before and during treatment, and then during follow-up visits. The patients received scans three months after treatment, and then came back for clinical exams every two to four months during the first two years, and then every six months in years three through five. Patients received X-rays or CT scans every six months, and again if they had positive HPV results.

“We are detecting subclinical disease with this blood test, and the imaging patients received confirmed those findings,” said UNC Lineberger’s Bhishamjit S. Chera, MD, associate professor in the UNC School of Medicine Department of Radiation Oncology and the study’s co-corresponding author. Chera presented the findings from the study at the ASTRO meeting.

Of the 70 patients whose blood tests were negative three months after treatment, none developed recurrence. Nineteen patients had positive blood tests, and eight of those patients developed recurrence. Physicians are continuing to monitor the remaining eleven who had positive blood tests but no evidence of recurrence.

“The most striking finding of our study is that of the patients who did not have any signal using our blood test, none of them developed disease recurrence,” Chera said. “That raises the question: Do we need to be scanning these patients? Scans come with a lot of cost, and because of the cost, we’re not able to do it as frequently. Patients end up having a lot of anxiety from one scan to the next, wondering if their cancer has come back. This blood test could spare patients the need for additional imaging and potentially alleviate some anxiety.”

The researchers say the next steps will involve investigating whether the test can be used prospectively to monitor patients and to make decisions that could avoid unnecessary imaging, thereby reducing costs. They also see additional applications for the blood test, including monitoring for other HPV-linked cancers, including cervical cancer.

“We are confident this blood test will be translatable to other cancers driven by HPV, and as a monitoring tool for cancer diagnosis,” Chera said. “We strongly believe that this test may also have a role in screening, not just for oropharyngeal cancer, but also cervical or anal cancers, possibly in a general population setting, or at least in patients who may be at higher risk of developing these conditions.”

In addition to Chera and Gupta, other authors include Sunil Kumar, PhD; Colette Shen, MD, PhD; Robert Ansdur, MD; Roi Dagan, MD; Jared Weiss, MD; Juneko Grilley-Olson, MD; Adam Zanation, MD; Trevor Hackman, MD; Jeff Blumberg, MD; Samip Patel, MD; Brian Thorp, MD; Mark Weissler, MD; Nathan Sheets, MD; and William Mendenhall, MD.

The study was supported by the University Cancer Research Fund, Burroughs Wellcome Fund, the University of North Carolina School of Medicine Department of Radiation Oncology, UNC Lineberger and the University of Florida School of Medicine Department of Radiation Oncology.

Intellectual property related to the test and held by the University of North Carolina at Chapel Hill has been licensed to Naveris, a company in which Chera and Gupta hold equity stakes.

###
TIME FOR SHARING... *My Cancer Experience*

My cancer experience started about twenty years ago (in my early 60’s) when I noticed a lump under my left jaw. I felt no pain or sensation but when it didn’t go away in a month, it was diagnosed as squamous cell cancer that had spread to my lymph node. I was again examined and they found the primary cancer at the base of my tongue. This came as a scary shock but I still felt I could beat cancer because of my good health and resilience during my life. After consulting with several different oncologists, I decided my treatment would be a combination of chemotherapy and radiation. I opted against surgery because the primary cancer was in a difficult location and the surgery could have compromised my neck and head movement and posture forever. During my treatments I found out, almost too late, that you had to be proactive to understand what the doctors and/or the technicians were specifically doing to you and what the goal was and also understand that you must be able to speak up if you have any questions or feel the treatment does not seem to be going as expected.

After the radiation treatment started, I discovered that the technicians were having trouble positioning the radiation mask and also they were not covering my teeth. I spoke up and the technicians corrected these conditions. I probably also should have insisted that the doctor supervise the application of the mask and the radiation. During the chemotherapy treatments which occurred on alternate days from the radiation, the first chemo drug turned out to have negative effects on me. I spoke up and the oncologist changed the chemotherapy drug which turned out to be more suitable for me. The good news is that I survived all the treatments despite difficulties and both cancers were killed, and I have since lived for over 20 years so far since the cancer. However I discovered over the years that the negative effect of radiation to your mouth increases as the years go by.

They call radiation “the gift that keeps on giving.” Because I had trouble swallowing and my esophagus was constricted, I needed a feeding tube and survived on a liquid diet through a feeding tube into my stomach. Eventually they were able to open my esophagus a little to gradually allow me to pass some food enough to remove my feeding tube. However I did lose about 35lbs. with this unintentional diet and have never regained it.

At present I am still fighting the harmful effects of the radiation and chemo even though these treatments saved my life. These effects include dry mouth (xerostomia), mouth scars and ulcers, damage to my teeth and one vocal cord and my tongue. The radiation and dry mouth caused several of my teeth to be removed or treated with a root canal. The teeth extraction was complicated because it might have caused very serious infection in my jaw bone. I therefore had six weeks of lying in a hyperbaric chamber for two hours – five days a week, to reduce the risk of that infection. To endure the increased pressure in the chamber, I needed to have tiny tubes inserted in my ear drums to equalize the pressure in my ears. The whole procedure including the teeth extractions was very trying but apparently successful. I now have an aperture in one of my ear drums but I am advised it will heal. The radiation may also have permanently damaged the muscles in my neck and upper back according to the opinion of several doctors. The damage did not appear until about 5 years ago but it presently is bothering my walking and neck to say the least. This can occur when the radiation is misdirected and deviates from the cancer target. This is why I pointed out above that the positioning of the head mask is very important.

At present I am still undergoing physical therapy to maintain my muscle strength and will probably continue therapy for years to come. The chemotherapy affected the nerves in my right foot and periodically causes pain when I walk but all in all it is manageable.

However, I have learned over the years that you can still survive and be productive for a long time. In other words, one can beat squamous cell cancer in the mouth. I state the above facts, not to complain, but in the hope that someone might find them useful in the selection of treatment, and also to show people can fight and beat mouth cancer. I understand that today’s treatment of mouth cancer does not always resort to radiation and chemo (which seems barbaric in retrospect) and instead drugs are primarily used. However, I am not a doctor and have no “professional” expertise in this subject, so cannot confirm the latter is correct. I have also heard that today laser treatments are also used in some cases. Recently I had acupuncture treatments to increase saliva flow in my mouth and found that to be helpful. I cannot speculate how long these treatments will have an effect but at least, at that time, they did provide some saliva flow particularly when used in combination with sugar free peppermints. Needless to say, drinking water and eating enough food are essential to producing saliva. Perhaps I should also mention that for my general health, I brush my teeth right after I eat any food using Biotene toothpaste, rinse my mouth with Biotene mouthwash two or three times a day, drink lots of water, always carry around a small three-ounce plastic spray bottle of water; and occasionally use Biotene saliva substitute spray. My food staples include milk, Greek yogurt, papaya fruit and juice, strawberries, cereals, some vegetables, salads, eggs and grits, soups and various meats ground or diced into small pieces and served with plenty of gravy. I avoid acidic and spicy foods and pepper. I also find eating a scoop or two of frozen yogurt a big help if I happen to eat something spicy without knowing that spice or acid is in the food!

I thank and appreciate the doctors, nurses, technicians and hospitals, not to mention my family and friends, for helping me with this fight. I also thank SPOHNC for their support and excellent newsletter which I have read over the many years since its inception.

~ William Mouzavires
mouzavires@aol.com

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November 2018
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