An Enlightening Summer Research Experience: Using Light Treatment for Oral Cancer Care

Jaeyoung Choi and Praveen Arany, BDS, MDS, MMSc, PhD

Upon completing my first year at Dental School, I was looking at getting involved with dental research this summer to learn more about progress in the field of clinical care delivery. Although we had just started learning about the sophisticated biomaterials and biotechnologies revolutionizing clinical dentistry, I was fascinated by the process of how these are developed and adopted into clinical practice. Learning more about the rich history and prestige of our school at the University of Buffalo, I discovered my summer project was able to be chosen from many exciting areas of research in every imaginable field from stem cells, the oral microbiome, biomaterials, oral cancer and saliva. However, one particular area caught my attention – using ‘light’ as a form of therapy. It first sounded like science fiction. My cynicism was further promoted by a quick scan of the internet that showcased several anecdotal stories. Nonetheless, my curiosity got the better of me and I set out to explore this scientific area more carefully.

The myths and magic of lasers
From super hero cartoons to James Bond movies, laser beams conjure up popular images of destruction and burning to selectively remodel or destroy targets. In medicine, this has been extended to cutting and reshaping tissues (think LASIK eye surgery) or to destroy microbes and tumors. These latter effects have been selectively enhanced with either simple exogenous dyes or more sophisticated versions using nanoparticles or liposomes. This technique is called Photodynamic Therapy and is gaining much attention especially with oral cancer. A third, less well-known form of therapy uses low dose light treatments to inhibit pain or inflammation as well as promote tissue healing and regeneration. This treatment is called Photobiomodulation (PBM) therapy. Various terms have been previously used to describe this treatment such as cold lasers, low level light/laser therapy, photostimulation, among many others. Following intensive searching I found that the Arany lab at University at Buffalo School of Dental Medicine (UB SDM) is leading some of this research with specific interest on tissue regeneration and wound healing.

An unfortunate sequela in Oral Cancer Care: Oral Mucositis
Oral cancers are one of the most prevalent cancer type with high mortality rates in the United States and worldwide. Current treatments for oral or head and neck cancer patients include surgery, chemotherapy and radiation therapy, either as stand alone or combined approaches. While these treatments are directed at killing rapidly dividing cancer cells, they unfortunately also damage or destroy normal cells such as hair follicles, salivary glands, and lining mucosal cells in the mouth and gut. Consequently, a majority of patients undergoing oncoterapy experience pain and ulcers in the mouth called Oral Mucositis (OM). Depending on the course and type of cancer treatments, its duration and severity can vary over days to weeks or months.

These side-effects can significantly affect quality of life in those patients by causing agonizing oral and throat pain resulting in reduced normal nutritional intake compounded by impaired sense of taste (dysgeusia), loss of appetite, oral dryness and depression. Moreover, severe side effects can be so debilitating so as to interfere with ongoing courses of cancer treatments often necessitating discontinuation or cessation that can affect treatment outcome. Current interventions for treatment-associated mucositis have been largely empirical with palliative mouthwashes, often including opioids. While these treatments provide temporary relief, they do not address the underlying causes of OM. There is clearly an urgent need for new approaches for OM management.

LIGHT THERAPY continued on page 2

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LIGHT THERAPY continued from page 1

A new paradigm: precise light activated pathways for therapy

The use of PBM therapy has gained much attention in recent years for its ability to relieve pain or inflammation and promote wound healing and tissue regeneration in various clinical scenarios. PBM utilizes specific types of lasers or LEDs and even broad-band light in the visible or near-infrared range spectrum at low doses. These wavelengths are in the non-ionizing range of the electromagnetic spectrum and do not produce tissue damage. PBM therapy generates therapeutic benefits in a non-thermal or heat producing non-surgical manner. Given the non-invasive and safe energy levels of light used for this treatment, there have been several comparisons drawn with sunlight and photosynthesis in plants. Our current understanding of the PBM therapeutic mechanisms can be categorized into three discrete areas of light-biological tissue interactions namely, within the cell (intracellular), at the cell surface (cell membrane), and outside the cell (extracellular). In the intracellular delivery pathway, light is applied and absorbed which results in disruption of the normal energy transport chain resulting in increased levels of destructive products within the cell. This low level laser energy has beneficial effects by producing dissociation of nitric oxide (NO) resulting in increased ATP and NO levels boosting cellular function and performance including blood vessel expansion (vasodilator function) that increases blood-supply to tissues that would have beneficial effects on inflammation and wound healing.

A second PBM mechanism involves absorption of light by photosensitive cell membrane receptors and transporters. This has been shown to have a central role in pain relief (analgesia) which are transient and reversible with no permanent damage to the tissues being reported.

A third PBM mechanism that was recently reported involves generation of very low amounts of extremely reactive chemical intermediates termed Reactive Oxygen Species (ROS), which have several biological targets including a latent protein called TGF-β1. This growth factor has several potent biological roles on a wide variety of cell types such as epithelial cells, fibroblasts, endothelial cells and macrophages. One of many key functions of this factor is to effect wound healing by promoting cell migration and matrix synthesis such as collagen and fibronectin. Another fascinating role of TGF-β1 is its ability to harness the regenerative potential of naturally present adult stem cells located in tooth pulp, mucosa and bone marrow, which promote tissue regeneration. A better understanding of these mechanisms in these clinical scenarios will enable more robust, reproducible clinical protocols to speed recovery.

The less-trodden path from the lab to the clinic

The well documented track record of the clinical safety and effectiveness of photobiomodulation therapy is of note. The oft cited ‘pyramid of evidences’ for clinical practice identify the most credible findings as those performed by systematic reviews and meta-analyses, where the validation of this approach will be confirmed. In addition to the advances made in the laboratory, an important update to the clinical practice guidelines was recently announced by the Multinational Association of Supportive Care in Cancer (MASCC).
It recommends PBM therapy as a routine treatment for cancer therapy-induced OM. A group of global experts rigorously analyzed data from 35 randomized, blinded human studies and concluded that there was clear data supporting the use of PBM therapy to prevent and treat oncotherapy-induced OM.

The clinical benefits of this non-invasive, non-pharmacological treatment appears to be a sustainable, cost-effective and safe approach with no reported side effects.

Several regulatory agencies and policy institutes including insurance companies, now recognize PBM therapy as a useful clinical intervention, with commercially available devices that can be used both intra-orally or extra-orally.

Studies concerning the role of PBM in supportive cancer care have garnered much attention, with a broad range of treatment applications from fibrosis (trismus) to taste dysregulation (dysgeusia). Like every therapeutic intervention, there appears to be a range of PBM device parameters and delivery techniques requiring attention. Another important aspect of this treatment is that is can be used to reduce the incidence of pain associated with OM lesions when performed before and during actual treatment. This has significant implications for the use of this treatment with routine oncotherapy as it appears to pre-condition the tissues and improves both physiological and psychological resiliency in undergoing cancer treatments.

A Br-(L)-ight Future!
There is increasing realization of the oral-systemic connection that emphasizes good oral care as a key constituent of overall general health. The key role of clinicians involved in cancer care is perhaps best exemplified by the management of oral mucositis. This appears to showcase the central role for the oral care specialist in the 2030 UNESCO oral health paradigm. The specific area of research around PBM therapy appears to have tremendous implications for cancer care as well as overall human health. The use of opioids in cancer care has brought renewed attention to the potentially limitations and detrimental side effects of these drug-based treatments. While opioids are extremely effective medications for various cancer-associated and other chronic pain ailments, it appears we may have a viable alternative for managing pain due to oral mucositis. The use of biophysical pain management approaches, such as neurostimulation and PBM therapy, offer an attractive alternative to reduce both exposure and prescription of opioids. Hopefully these novel and safe to use technologies will become more routinely employed in the near future.

Editors Note: Jaeyoung Choi is a second year dental student at University at Buffalo School of Dental Medicine (UB SDM) in Buffalo, NY. He had also served as a Non-Commissioned Officer in U.S. Army Reserve and recently was commissioned via Army Health Professions Scholarship Program. He has been pursuing research since his undergraduate at UB as a Biomedical Science major and has continued his research interests as a dental student in the Arany lab, Oral Biology department since Feb 2018. The main topic of his interest is Photobiomodulation therapy for oral cancer care treatments in management of oral mucositis and altered taste sensation. Up on his expected graduation in 2022, he will serve as a dental officer in the Army. He looks forward to serving our country with his clinical and research skills and knowledge.

Praveen R. Arany received his dental degree and completed a joint PhD-Residency program in dental medicine at Harvard University as a Harvard Presidential Scholar. He has two certificates in clinical translational research from Harvard Medical School and National Institute of Health. He pursued postdoctoral fellowships at Indian Institute of Sciences, National Cancer Institute and Harvard School of Engineering & Applied Sciences. He served as an Assistant Clinical Investigator at NIDCR, NIH, Bethesda. He is currently an Assistant Professor in Department of Oral Biology and Biomedical Engineering, University at Buffalo. Dr. Arany currently holds various key leadership positions including the current President of the World Association for Photobiomodulation Therapy (WALT). His primary research focuses on the molecular mechanisms and clinical translation of Photobiomodulation Therapy.

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IN MEMORIAM

George “Eugene” Staggs

SPOHNC was deeply saddened to learn of the passing of Gene Staggs, who was a long-time attendee and also much beloved Co-Facilitator of SPOHNC’s Arkansas Northwest Chapter Support Group for an extended period of time. Gene passed away Tuesday, May 21st.

Gene was an accomplished professional and well-loved by friends and family. He always did everything he could to participate in and promote SPOHNC and the Chapter support group. Thoughts from the group were shared about this kind, caring and committed man…

Jack and Temple Igleburger, Facilitators of the group, shared…Gene was Temple and my choice to take over the group before he was diagnosed with a new cancer. We shared with Mary Ann that he was our assistant facilitator a couple of years ago. We knew he was dependable, never missed a meeting (unless it was hunting season) and was always looking for newsworthy information to share with the group about hopeful new treatments, speakers to consider and other helpful bits and pieces for our group. He facilitated several meetings after I was treated and recovering from my 2nd oral cancer in early 2016.

Gene was always positive and looking forward to participating in the meetings. Even when his speech got so bad from this last cancer, he made it to the meetings because he wanted to be part of the group. Ironically it wasn’t cancer that finally beat him. It was a stroke!

Temple noticed that during the last meeting he attended, Gene wanted to speak and share something; but he knew he wouldn’t be understood because his speech had worsened as far as clarity. You could tell by the look in his eyes. Unfortunately, that was his last meeting.

Support group attendee Lissa Applewhite shared her thoughts with SPOHNC also… I was inspired by Gene from the beginning… positive attitude, words of encouragement, and helpful tips from his experience. Then as his difficulties began, he still remained positive, I know that was hard for him but he continued to attend meetings even when he struggled with communication. That took a lot of strength and determination. I will miss him!

More thoughts came pouring in from other group attendees about their beloved friend…

Pattie Lanning shared…During one of the first SPOHNC meetings that I met Gene, I realized we were not only survivors of tonsillar cancer but neighbors in west Fayetteville also - within a few blocks of each other. We also were both treated at UAMS Winthrop Rockefeller Cancer Institute, in Little Rock.

I saw Gene in the neighborhood before I moved away in 2016. At that time, he was happy & doing well - enjoying survival - and LIFE. I am so glad to hear that these last 5 years were very good for Gene. I’ll think of him as when those days were more plentiful. Please know that my heartfelt condolences are with Gene’s family at this most difficult time.

The group’s youngest attendee, Rita Avila, 29, who is an incredible young woman, shared this with SPOHNC…I met Gene through the SPOHNC meetings of our local chapter. As we got to know each other, we learned we had the same profession - Industrial Engineering! I was still in school and had gone through two bouts of cancer battles while trying to get my degree. Needless to say, I was extremely surprised when I was pulled in to one of my professor’s offices and told that I’d be receiving scholarships to help me pay for my education, and one of those was the Gene and June Staggs scholarship - Gene had personally gone to the University of Arkansas IE department to say he wanted ME to have his scholarship! I was so grateful. I thanked him personally next time I saw him, and I received an award with the scholarship’s name that sits in my home to this day. He was a wonderful person, even getting me in touch with his son, Stuart, so I could ask him for advice since his son was an Industrial Engineer as well. I’ll never forget how much that meant, and still means to me, that someone believed I could go through all my cancer treatment and still graduate, which I was able to do. Gene will always be loved and remembered by me and my family.

Jack and Temple shared this as well, about their dear friend…The last time he attended our meeting, April 20, 2019, he left a little early, probably to see an Arkansas sporting event. Temple mentioned to me that he looked rather frustrated that he couldn’t speak. Unfortunately, his capability to speak seemed to be getting more difficult over the past few months. He will be missed immensely by his family, many friends, and our SPOHNC members that had the privilege to know him.

Ronnie, Temple and I attended Gene’s memorial service at Central United Methodist Church, in Fayetteville. Afterwards, we talked briefly with June Staggs and paid our respects.

Gene’s son, Stuart Staggs, thanked us for attending his father’s service. He also commented about the positive support Gene received from our SPOHNC group. Stuart planned to attend a future SPOHNC support group meeting to thank the group in person.

SPOHNC recognizes the dedication and tireless efforts of Gene as he stepped in to facilitate and inspire the Arkansas Northwest Chapter. Gene and his family will remain in SPOHNC’s thoughts and prayers.

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“Grief is never something you get over. You don’t wake up one morning and say, ‘I’ve conquered that; now I’m moving on.’ It’s something that walks beside you every day. And if you can learn how to manage it and honour the person that you miss, you can take something that is incredibly sad and have some form of positivity”

~ Terri Irwin
Palbociclib plus cetuximab shows antitumor activity among head and neck cancer subset

August 20, 2019 - A combination of palbociclib and cetuximab demonstrated substantial antitumor activity among patients with platinum- or cetuximab-resistant HPV-unrelated head and neck squamous cell carcinoma, according to results of a multigroup phase 2 trial published in The Lancet Oncology.

“Currently, effective therapeutic options for patients with cetuximab-resistant HNSCC are few. Traditional chemotherapy has marginal activity, with 6% of patients or fewer achieving a tumor response,” Douglas R. Adkins, MD, professor in the oncology division of the department of medicine at Washington University School of Medicine in St. Louis, and colleagues wrote. “The most effective therapy for these patients might be pembrolizumab [Keytruda, Merck] or nivolumab [Opdivo, Bristol-Myers Squibb], which have resulted in responses in 11% to 16% of patients and median OS of 6.9 months to 8 months. Novel treatment strategies are needed for patients with recurrent or metastatic HNSCC.”

The combination of the cyclin-dependent kinase (CDK) 4/6 inhibitor palbociclib (Ibrance, Pfizer) and epidermal growth factor receptor inhibitor cetuximab (Erbitux, Eli Lilly) appeared safe and tolerable in the phase 1 portion of the multicenter trial, conducted across eight U.S. university sites.

For phase 2, Adkins and colleagues divided 62 patients with HPV-unrelated HNSCC (median age, 66 years; interquartile range [IQR], 58-70; 71% men) into two groups: those who were platinum-resistant (group 1; n = 30) and those who were resistant to cetuximab (group 2; n = 32). Primary tumor sites included the oral cavity (42%) and larynx (29%), and 81% of patients had received one or two prior lines of treatment for metastatic or recurrent disease.

All participants received oral palbociclib (125 mg daily on days 1-21) and IV cetuximab (400 mg/m² on day 1 of cycle one, followed by 250 mg/m² once weekly) in 28-day cycles. Objective response, defined as complete and partial responses per RECIST 1.1 criteria, served as the primary endpoint.

Researchers followed patients in group 1 for a median 5.4 months (IQR, 4.4-12.1) and those in group 2 for a median 5.5 months (IQR, 4.3-8.3).

Among 28 evaluable group 1 patients, 11 (39%; 95% CI, 22-59) attained an objective response, including three complete responses. Repeat scans confirmed all but one of the responses. Half of the group 1 patients (n = 14) had stable disease and three (11%) demonstrated progressive disease. Median duration of response was 4 months (IQR, 1.8-5.6), median PFS was 5.4 months (95% CI, 3.4-7) and median OS was 9.5 months (95% CI, 5.3-16.5).

Among 27 evaluable group 2 patients, five (19%; 95% CI, 6-38) achieved an objective response, including one complete response. Four of the responses were later confirmed. Thirteen of the group 2 patients (48%) had stable disease and nine (33%) demonstrated progressive disease. Median duration of response was 6 months (IQR, 2-15.5), median PFS was 3.7 months (95% CI, 2.9-4.3) and median OS was 6.3 months (95% CI, 4.9-10).

In each group, only one patient with a tumor response previously had received immunotherapy.

The most prevalent grade 3 to grade 4 adverse event associated with palbociclib was neutropenia, which occurred in 34% (n = 21) of all patients. The researchers did not document any treatment-related deaths.

The researchers cited various limitations to their study, including its single-group design, and noted that the results will need to be confirmed in a controlled trial with a larger sample size. They acknowledged that immunotherapy might have affected OS outcomes, and that the study design did not permit the evaluation of whether palbociclib’s antitumor activity occurred directly or by reversal of primary cetuximab resistance.

These data suggest a need for further study of palbociclib in patients with recurring or metastatic HNSCC, according to a related editorial by Garth W. Strohbehn, MD, hematology/oncology fellow at University of Chicago, and Everett E. Vokes, MD, professor of medicine and radiation oncology physician-in-chief at University of Chicago Medicine.

“However, we should be circumspect about the prospect of CDK 4/6 inhibitors as standardized, cost-effective therapies in recurrent and metastatic HNSCC,” the authors wrote. “Bringing this class of drugs to head and neck oncology clinics, as either monotherapies or immunotherapy partners, will require appropriately controlled studies linked to biomarker evaluation with both survival and cost-effectiveness endpoints.”

Disclosures: Adkins reports research funding from Pfizer as part of the work presented in the study; personal fees for advisory/consultant roles from Celgene, Cue Biopharma, Eli Lilly, Loxo Oncology, Merck and Pfizer; and research funding from AstraZeneca, Atara, Blueprint Medicine, Bristol-Myers Squibb, Celgene, CellCeutix, CellIdex, Eli Lilly, Enzymech, Exelixis, Gliknik, Kura, Matrix Biomed, Medimmune Innate, Novartis, Pfizer and Polaris outside the submitted work. Please see the study for all other authors’ relevant financial disclosures.

Vokes reports consultant/advisory roles with AbbVie, Amgen, AstraZeneca, Bristol-Myers, Celgene, EMD Serono, Genentech, Merck, Novartis and Regeneron. Strohbehn reports no relevant financial disclosures.

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HEAD AND NECK CANCER NEWS

Surgical planning for head and neck cancer benefits from FDG-PET/CT

A new Journal of Clinical Oncology report immediately informs practicing clinicians of the effectiveness and benefits of FDG-PET/CT in head and neck cancer patients, especially those who are clinically node-negative.

The Journal of Clinical Oncology has published the results of the largest prospective multicenter trial conducted of FDG-PET/CT in head and neck cancer, providing rigorous data about its performance. The nonrandomized phase two trial, ACRIN 6685, followed 287 patients with newly diagnosed stage T2 to T4 disease, all being considered for surgery when at least one side of the neck had no evidence of lymph node involvement based on a physical exam, preoperative MRI and/or a CT evaluation (clinically node-negative or cN0). It found that FDG-PET/CT imaging achieved a true negative in 94 percent of patients (by standardized uptake value (SUV) analysis), or 87 percent of patients (by visual assessment). The trial was designed and conducted by researchers in the ECOG-ACRIN Cancer Researcher Group with support from the National Cancer Institute, part of the National Institutes of Health.

“The information provided by FDG-PET/CT of the cN0 neck changed the surgical plan 22 percent of the time,” said the study’s principal investigator and lead author Val J. Lowe, MD, a nuclear medicine specialist at Mayo Clinic in Rochester, MN. “These findings suggest that FDG-PET/CT may assist the clinician in deciding on the best therapy for the clinically N0 neck in head and neck squamous cell carcinoma, possibly preventing patient morbidity and/or saving significant costs.”

The reliability of FDG-PET/CT in detecting lymph node metastases in head and neck cancer is well proven and is reported to be cost-effective in staging patients with cN0 necks. Most of the data is single-institutional and retrospective. Surgeons often perform elective neck dissections in patients with cN0 necks at high risk for recurrence because clinical exam and structural imaging do not reliably identify all metastatic disease. This approach has been found to improve survival but may be associated with substantial complications for patients.

“A negative scan in the cN0 neck has been demonstrated by our study to have a very high negative predictive value,” said co-principal investigator and co-author Brendan C. Stack, Jr., MD, a surgeon at the University of Arkansas for Medical Sciences. “Additionally, the positive PET leads the surgeon to consider resection of nodal levels that might harbor occult metastatic disease.”

Participants older than 18 years of age with newly diagnosed, first-time head and neck squamous cell carcinoma were recruited from 22 qualified sites in the United States and one in Beijing, China. FDG-PET/CT was compared with pathology findings at neck dissection. Participants all received a pre-surgical FDG-PET/CT scan to which the surgeon was initially blinded and a contrast-enhanced MRI or CT scan of the neck (all within four weeks of surgery).

The surgical plans were devised by the local surgeons on the basis of physical examination and CT and/or MRI results, but not PET/CT and thereafter formulated with the available PET/CT result. Both plans were collected prospectively with questionnaires. All data were anonymized to protect the identities of the participants.

FDG-PET/CT scans and pathology findings were available for 270 cN0 neck sides from 212 participants. Pathology was randomly over-read by a central pathologist and all scans were reviewed by a team of central readers. For visual assessment, the negative predictive value (NPV) specific to the cN0 sides was 0.868 (95 percent CI, 0.803 to 0.925). For dichotomized maximum SUV, the NPVs specific to the nodal basins were 0.940 (95 percent CI, 0.926 to 0.952) and 0.937 (95 percent CI, 0.925 to 0.949) at prespecified cutoffs of 2.5 and 3.5, respectively. The optimal cutoff maximum SUV was determined to be 1.8, with an NPV of 0.942 (95 percent CI, 0.930 to 0.953).

The FDG-PET/CT-informed surgical treatment plan was changed in 51 of 237 participants (22 percent) compared with the PET/CT-blinded surgical plan. In 34 participants (12 percent), this led to planned dissection of additional nodal levels. In 12 participants (5 percent), this led to fewer planned dissected nodal levels. Negative PET/CT scans in N0 necks were true negative in 87 percent and false negative in 13 percent.

“This trial is an excellent example of a means to implement personalized medicine in the setting of head and neck cancer management,” said Dr. Stack.

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We Have Walked In Your Shoes: A Guide to Living With Oral, Head and Neck Cancer Second Edition

by Nancy E. Leupold & James J. Scibetta, DMD, PhD

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photo courtesy of PJ Jordan, Caregiver, NSVN Volunteer and extraordinary woman

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“Souper” September Recipes from “Eat Well Stay Nourished A Recipe and Resource Guide For Coping With Eating Challenges”

Compiled and Edited by Nancy E. Leupold, Survivor, Founder & President Emeritus

Chicken Gumbo (from Volume One)

2 skinless boneless chicken breast halves
3 Tbsp. vegetable oil
1 ½ c. chopped onion
½ c. green pepper
1 clove garlic, minced
1 Tbsp. flour
2 qt. water
2 chicken bouillon cubes
1 bay leaf
1 c. white rice
1 Tbsp. sugar
1 c. tomato sauce
1 tsp. Worcestershire sauce
1 ¾ tsp. fried thyme
1 -10 oz. package frozen okra, thawed and chopped with stem caps removed
2 - 14 oz. cans stewed tomatoes, chopped


Note: When I was undergoing radiation therapy, both my taste buds and my salivary glands took quite a beating. One of the dishes I could eat and tasted right was chicken gumbo. My husband, the resident chef, made it and ate it with me just about every other day throughout those challenging months. If you’re short on saliva, here’s a recipe that helps make up the difference.

~ Susan B., Washington

Applesauce Cake – (from Volume Two)

1 c. sugar
½ c. butter
2 eggs
½ tsp. salt
¾ tsp. cinnamon
¼ tsp. allspice
¼ tsp. cloves
Pinch of nutmeg
1 c. raisins
2 c. flour
2 tsp. baking soda
1 tsp. vanilla
1 ½ c. applesauce
1 Tbsp. confectioners sugar (for topping)

Cream sugar and butter. Add eggs, applesauce, cinnamon, allspice and cloves. Sift together flour and baking soda and add to mixture. Add vanilla and raisins. Mix. Pour into greased loaf pan. Bake at 350 degrees for one hour. Cool in pan. Remove, sprinkle with confectioners sugar. Serves 12. 272 Calories per serving

~ Nancy Leupold, Survivor and SPOHNC Founder - Massachusetts
Time for Sharing... A Testament to Faith/Grace (Jesus)

This is not a story but a testament of a journey of faith. At the end it was proclaimed by an MD: “Your faith did more for you than any medicine I ever gave you.”


Biopsy affirms “cancer.” ENT reports this directly to my wife, who brings it to me (in the recovery room) with worry, concern and fear. My response: “Trust in God with all your heart and all your soul and lean not to your own understanding.”

We seek another opinion. This physician displays a plaque in his office that reads: “anticipate miracles” The right man at the right time – Faith/Grace. “There is no medicine like hope, no incentive so great, and no tonic so powerful as expectation of something tomorrow” – Orison Swett Marden

Second opinion, substantiates cancer but another type. All oncologists gather (tumor board). It’s stage 4 nasopharynx cancer. Prognosis: very short rate of survival (ten percent, I recall).

We develop a treatment plan. (we, for I questioned as well. “Evidence tells us that supporting patients to be actively involved in their own care, treatment and support can improve outcomes and experience for patients, and potentially yield efficiency savings for the system through more personalized commissioning and supporting people to stay well and manage their own conditions better. england.nhs.uk) It’s decided chemotherapy 24 hours a day for one week. Two week rest and then second round of identical chemotherapy for another week, followed by six to eight weeks of daily radiation (twenty minute sessions) with some outpatient chemotherapy two days a week.

Each day during chemo was a struggle to set about. Very weak. However, determined each day to rise, dress and begin my day. All to maintain some facsimile of normalcy. After all yes, I did have cancer, but, cancer did not have me – Faith/Grace

Once up, I made rounds about the ward to exhilarate others. (Faith/Grace carried me). I was advised not to get close to the other patients for they well may not be there the next day. But Faith/Grace encouraged: “you lift them, that lifts you and together you all rise.”

At the end of my day I made a summary of my visits and entered the activities into my journal. Yes, a journal. It helped me track my care and divert my thoughts from chemo. It was my new gig. This journal, that I still have today, is a reminder of how far I have come and a comfort in bad times. In addition, I received many cards, handicrafts, well wishes, and prayers from the anointment group, the six musketeers (my wife and special friends). I placed the cards and handicrafts in a gift bag (a Christmas gift bag). I place that bag under the tree and handicrafts in a gift bag (a Christmas gift bag). I placed the cards and handicrafts in a gift bag (a Christmas gift bag). I place that bag under the tree each Christmas as a reminder and I value it above all other presents. I visit this bag each Christmas as a reminder and I value it above all other presents. I visit this bag throughout the year especially in bad times over the course of this illness. Mostly, my good days outweighed my bad.

Immediately following chemo, radiation began and continued for eight weeks. Over the course of radiation and sometime afterwards it became necessary to remove all of my teeth due to effects from radiation exposure. A principal battle scar.

Finally, surgery (radical neck dissection) to remove lymph nodes (seventy in all) so the cancer would not have any place to return. Another principal battle scar followed up with aggressive physical therapy to restore the neck and swallow therapy to aid swallowing with my newly deformed throat. Another principal battle scar.

Then, began the wait. Mindful it could be very short. A year passed. Three years passed. Six years passed. “Maybe out of the woods possibly”? And voila, here we are twenty eight years later.

PRAISE: FAITH/GRACE (JESUS)!
~ Aaron Parker, apparker2@verizon.net

Head and Neck Cancer Symposium
On behalf of SPOHNC, we would like to introduce you to an event spearheaded by the American Head and Neck Society (AHNS) and the Head and Neck Cancer Alliance. SPOHNC is partnering with both organizations to host a one day Head and Neck Cancer Survivorship Symposium in Chicago, July 18, 2020 at the Hyatt Regency from 10am – 4pm. There is no registration fee to attend.

Symposium topics will include: dental care, survivorship care plans, exercise, nutrition, advocating for oneself and more. There will also be discussions about issues such as swallowing, caregiver needs and many more topics of great concern.

Attendees will also be invited to the opening day address of the American Head & Neck Society’s meeting on Sunday, July 19th, featuring speaker, Grant Achatz, a renowned chef and survivor of stage 4 squamous cell carcinoma.

Head and neck cancer survivors and caregivers interested in learning more, please sign up to receive additional information at: https://www.headandneck.org/symposium/
SPOTLIGHT ON SPOHNC’S MEDICAL ADVISORY

David A. Schwartz, MD

Attesting ‘Something Remarkable’

When David Schwartz, MD, was finishing college at Stanford, he wasn’t sure what was next.

I got an opportunity to be a counselor at Camp Ronald McDonald in Los Angeles, one of the first camps in the U.S. specifically created for kids with cancer,” Dr. Schwartz recalled. “It was a life-changing experience. It was so formative, so emotionally resonant that it placed me on a new path. I wanted to be a cancer doctor.”

After medical school at UCLA, Dr. Schwartz trained and worked at some of the leading cancer research centers in the country, including Fred Hutchinson Cancer Center in Seattle, MD Anderson Cancer Center in Houston, and UT Southwestern in Dallas.

In 2016, with a curriculum vitae the size of a phone book, Dr. Schwartz was recruited to Memphis as Vice-Chair in the Department of Radiation Oncology at the University of Tennessee Health Science Center-West Cancer Center. He currently serves as interim chair of the Department of Radiation Oncology at the UTHSC College of Medicine and is also Professor in the Department of Preventive Medicine.

As founder and director of the Center for Health Equity, which is part of the Center for Innovation in Health Equity Research at UTHSC, Dr. Schwartz has found Memphis to be a perfect fit.

“Coming to Memphis gave me the opportunity to do something remarkable, to a cancer disparities program in direct partnership with its home community,” he said. “I came with the purposeful intent to create a health disparities and outcomes research center in radiation oncology. It’s the first of its kind in the United States.”

Dr. Schwartz is now helping to lead the creation of a new academic cancer center spearheaded by Methodist Le Bonheur Healthcare and UTHSC. “We are building a 21st century cancer center from the ground up. My partners are the best of the best; they’re national experts from big-time places. We’ve faced up to the fact that Memphis has never had a nationally recognized academic referral center for adult cancer like St. Jude Children’s Research Hospital, and, simply put, it deserves one.

“But this center has to fit Memphis, not the other way around. We are framing the center as being not just a partner with the community, but as a true part of the community. We are picking what is the best of Memphis - the authenticity, the soul, the culture - and mixing it with what’s best from outside Memphis. We will bring the best technology and talent from across the country and place it into the hands of our neighbors and our clinical colleagues practicing in the region.”

There may not be a better place or greater need for such an ambitious project than Memphis, with its large medically underserved populations and high poverty levels. Rates of cervical cancer, head & neck cancer, breast cancer and lung cancer are among the highest in the nation. Much of that, he said, is preventable.

“If you look at the instances and risks for hypertension, diabetes, obesity, chronic renal failure, stroke or heart attack, it walks hand in hand with cancer risk,” Dr. Schwartz said. “I really harp on my patients to get primary care and focus on their overall health, for themselves and their families, because cancer is the stalking horse for just about every chronic illness you can think of.”

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He envisions a more proactive approach to healthcare that not only helps current patients, but also reaches out to their families and neighbors to prevent cancer through healthy living.

“What we as Americans think of as healthcare focuses mostly on restoring health after it has been lost, which is the wrong time to jump into the fight,” Dr. Schwartz continued. “We need sustainable, affordable, authentic ways to nurture health, to keep it intact in the first place. How can we engage with our neighbors to ensure we can all flourish in a more healthful city without expensive medications or procedures? We are focusing many of our current research projects on this question.

“Nobody knows what one individual’s cancer comes from, but we all know instinctively that the way you live your life, the things you’re exposed to, your family background, and maybe even your emotional and psychological state - all of these things weave together into a tapestry that determines whether you thrive or don’t.”

Dr. Schwartz says he, wife Katherine and their two daughters, ages 10 and 12, have been taken by the friendliness and soulful charm of Memphis, but he also sees “an underdog mentality” about the city that is unwarranted, given the medical resources and level of expertise that is here.

“We need to raise our expectations of what we have to offer to the city and what we can help our city attain on a more global level,” he said. “Here in Memphis there’s a lot of cancer, and we have to be realistic about the profound social realities and disparities impacting our city. But I believe it’s ironic and happily fixable, that the most under-utilized community-based cancer fighting resource is our own medical community here in Memphis. We purposefully will never create a specialty center ‘black hole’ for doctors to refer patients to, never to hear from again. We’re partners.

“We plan to work with our colleagues entrusting us with their patients. We will study and establish holistic healthcare pathways that provide not only durable cures but also durable health, for everyone. This is my personal mission at the medical school. It is also shared as a mission, I believe, by everybody I’m blessed to work with.”

Since Dr. Schwartz is seeking to bring cancer care directly into the worlds of patients to make them active partners in the quest for good health, why not start early?

The radiation oncologist’s work recently got the attention of TEDx Memphis, local independent producers of videos featuring expert speakers on science, business, technology and other disciplines.

The project that got their attention was a National Institutes of Health grant submission that he helps to lead that would allow 6th and 9th graders to apply for cancer research grants in their communities.

He is partnering with Michelle Martin, PhD, at UTHSC College of Medicine, and Idia Thurston, PhD, University of Memphis, on the project. Martin is head of the UTHSC Center for Innovation in Health Equity Research. Thurston is an assistant professor in the Department of Psychology and is an adjunct assistant professor in the Department of Pediatrics, UTHSC/Le Bonheur Pediatric Obesity Program.

The young students would take a fundamentals of science research course and then, working with their teachers, scientists and doctors, formulate their own research questions and research plans to answer those questions.

“We envision the projects being focused on real world issues that the kids see as directly relevant to their own neighborhoods and their own lives,” Dr. Schwartz explained. “This could be something as straightforward as hypertension control and its relationship to cancer risk, or as profound as trust and trauma issues impacting their neighbors’ relationships with cancer providers.

“They will apply for grants, get resources, literally own their projects, and then present their results in a local scientific forum to their community. They may even get the chance to present at real medical meetings and publish in real medical journals. We want to train the new energetic experts who will replace us, and who will excite younger students to follow them. There’s never been a program like this in the country. I think it’s pretty cool.”

Editors Note: This article was reprinted with permission from the Memphis Medical News. Author credit to Lawrence Buser - March 14, 2019.

While we were enjoying the summer months, we missed a very important occasion…the birthday of someone who is near and dear to our SPOHNC hearts. Happy Birthday Gail Fass!!!

Gail is a survivor, and has always been a huge supporter of SPOHNC. She became a volunteer for our National Survivor Volunteer Network in 2003, and is also a member of SPOHNC’s Board of Directors where she holds the position of Secretary.

SPOHNC CELEBRATES YOU!

Gail is an asset to SPOHNC. Her compassionate ways and her knowledge of non-profits have been an invaluable resource for our organization since we met her. Always willing to lend a listening ear and a helping hand, Gail gives of herself and her life experience in a way that no one else can. We love this special lady!

Gail – we hope that whatever you did to celebrate your special day, it involved fun, laughter and lots of celebrating! We wish you a year full of as much love as you share with everyone around you.

Happy Birthday Gail!
### CHAPTERS OF SPOHNC

*(125+ and growing!)*

Contact SPOHNC at 1-800-377-0928 for Chapter information & Facilitator contact information

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*“Your group is the antidote for the “aloneness” of having cancer and what it entails.”*

~ Betty C.
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