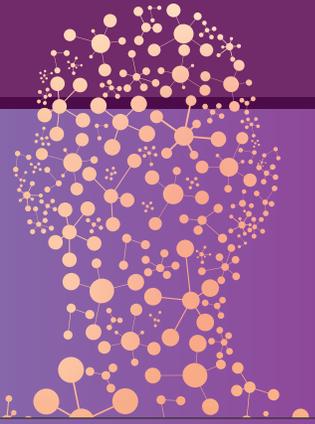


HEADWAY

SINCE 2007



NEWS ON ADVANCES IN THE PREVENTION, DETECTION, AND TREATMENT OF HEAD AND NECK CANCERS

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Dental care for head and neck cancer patients

By Elizabeth Pawlowicz, DMD



Elizabeth Pawlowicz, DMD (left) with Lisa Varner, RDH (right)

Dental care before, during, and after treatment for head and neck cancer is vitally important to medical outcomes success as well as long-term patient satisfaction. The UPMC Department of Otolaryngology and the University of Pittsburgh School of Dental Medicine have partnered to provide patients with access to ongoing support. Whether patients need routine cleanings and check-ups or complex specialty reconstruction, our team remains committed to patient care.

Our team encompasses ENT surgeons, medical and radiation oncologists, oral surgeons, general dentists, hygienists focused only on oncology patients, and maxillofacial prosthodontists.

Patients seen through the Survivorship Clinic are initially seen by the dental team of Elizabeth Pawlowicz, DMD and Lisa Varner, RDH. Dr. Pawlowicz and Ms. Varner have dedicated years of clinical practice and continuing education to maximizing positive dental outcomes for head and neck cancer patients. Patients who are being seen pre-treatment are thoroughly screened for potential dental problems that need to be addressed before treatment. These patients are also offered education on our recommendations for increased dental home hygiene protocols as well as strategies to share with their existing dental team for changes to standard protocols for post-treatment care.

Some patients that receive a diagnosis do not have immediate access to pre-treatment dental services. Dr. Pawlowicz and Ms. Varner are available to see these patients and help to optimize them for treatment. Many of these patients will continue to see them post-treatment as well. It is always our goal to return patients to their hometown dentist, once stabilized after treatment. We have found our professional colleagues are happy and willing to resume treating patients who have stabilized after treatment.

In addition to using prescription strength toothpaste twice daily at home, we recommend custom fit fluoride trays for daily use after radiation treatment for at least several years. Patients should see their dental hygienist for a cleaning every three months and be checked for decay. One of the most troublesome effects of radiation to the head and neck is permanent dry mouth. This uncomfortable condition can lead to both periodontal (gum) disease and tooth decay. Seeing the dental team more frequently than before treatment is aimed at keeping these conditions in check by treating them at their first sign.

Our oral surgery and maxillofacial prosthodontic teams are available to patients for reconstruction options and to treat any conditions that may arise. Along with our ENT

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There is always hope

By Stephanie Donati
Cancer Survivor



Stephanie Donati with her husband Ray

I was doing everything right in my life to stay healthy by exercising, eating a healthy diet, maintaining appropriate weight, and having recommended checkups with my doctor. I felt great and was not on any prescriptive medications. So, what could go wrong? After much detective work I was soon to find out something could go seriously wrong.

It started with a pain in my right side which seemed like a pulled muscle from working in my yard. It subsided with Tylenol. However, two weeks later the same pain occurred but again I dismissed it as muscular. When it became paired with abdominal discomfort I began to worry. Initially, I thought it could be a UTI but urinalysis ruled that out. I went to my PCP who suspected a gall bladder issue and ordered an ultrasound. His office called to inform me my gall bladder was fine. The images were unclear but there was nothing to worry about. At this time, I was switching to a new PCP due to the retirement of my current doctor. My new PCP, after seeing the unclear ultrasound, ordered a CT scan to further investigate the abdominal discomfort. As a side note, this was December 29, 2022 and we had planned a Hawaiian trip in January. Well the ultrasound changed our plans. My ultrasound was done at 10:00 a.m. and by noon the doctor personally called me to say that the results were troublesome as my ovaries were enlarged and that he wanted to talk to my gynecologist.

My cancer journey began with a referral and my first appointment with Dr. Eirwen Miller, a gynecological oncologist at Allegheny Health Network, on January 5, 2023. She laid out a plan which involved surgery on January 16, 2023. While I was happy things were quickly falling into place, I was concerned this meant something was seriously wrong.

Fast forward to surgery. I came out of recovery and saw the face of my husband and realized it was serious. He said Dr. Miller had to close my abdomen as the cancer had spread to other organs. It was determined to be Stage III ovarian cancer.

Next step, three rounds of chemotherapy and genetic testing. Chemo went well with minimal side effects. Genetic testing indicated that my tumor was positive for the BRCA 2 gene which was a good thing because it made the chemo more effective. A second CT scan showed a significant reduction in the evidence of cancer. I was now ready for a second surgery for a total hysterectomy and debunking of the cancer. Dr. Miller explained there was a possibility of a bowel resection and temporary colostomy.

On the day of my second surgery, my husband was told that the surgery could last up to seven hours and they would keep him informed every two hours. Two hours into the surgery my husband got a call from Dr. Miller, who reported the operation went well. There were no visible signs of cancer and my organs looked "pristine," and I was on my way to recovery. The OR staff were ecstatic as they compared my first CT scan to what they were seeing. When I awoke, my friend and husband were anxious to share the good news. God was certainly watching over all of us that day.

Several weeks after the surgery, I proceeded to get three more rounds of chemo to deal with any microscopic cancer cells. I am now in a maintenance phase with anti-cancer medication and close monitoring by my oncology team.

Throughout my journey, I was uplifted by the support and care of my family, friends and church community. But, a surprising form of support came in a box in the mail. I could not identify the name or address; we had not ordered anything and it wasn't Christmas. Who was Mrs. Claus and why was she sending me a package? Upon opening it, I was shocked at the contents. It was packed with comfort items for people dealing with cancer. I cried as I read the hopeful and inspiring notes from the people who made my prayer shawl and my port and abdomen pillows. I was struck by how total strangers would take the time to give me support and hope. In the box was a note indicating that my good friend, Sue Knarr, requested the box. A week later, Jeana Watenpool, president of the Mrs. Claus

Club, called to check on me and pray a heartfelt, personalized prayer with me. This package meant so much to me and my husband that in November, we attended Mrs. Claus' uplifting fundraising event. We plan to attend every year and do anything we can to support this life affirming organization.

My end message to those dealing with a cancer diagnosis is to stay strong and fight the fight. THERE IS ALWAYS HOPE. Find a doctor you trust and feel comfortable with. Open your heart and self to friends and family. Let them help you physically, mentally and spiritually. I was always a private person when I had sickness but I gained so much from letting people into my life. It's amazing how much the support keeps you going by giving you hope and seeing the good in the struggle.

I want to take the opportunity to thank my fantastic West Penn Gynecological Oncology Team, especially Dr. Eirwen Miller, Heather, and Donna. To my husband, Ray, our son Nick and his wife Nikeba, family and friends, especially the Illuzzis, the Scerbos, and Fr. Ben Dagher. In closing, a friend gave me a t-shirt with the words Faith, Family and Friends. I think that says it all.

Pieces

By Rhonda Fries
Cancer Survivor



One day in August of 2021, I went for my routine mammogram like every other year. During my appointment they told me that I would need to return for more

testing. The days waiting for these results slowly took pieces of my sanity. One abnormal result and I had eight doctors all wanting a piece of me, literally, in some way — a piece of a body part, a biopsy, blood cells, along with many other labs. This is what life became after the "Big C" diagnosis. The day was September 20, 2021 when I got the call that said "two areas of invasive ductal carcinoma of the right breast." Those are the only words I remember. The color pink flashed before my eyes. My husband said, "One day at a time." This is when I slowly realized that this was not a dream.

More tests, more scans, more blood draws, more days of work missed. Then, meeting my oncologist, more bone scans, MRIs, and positive lymph node results. More pieces falling from my puzzle of life. Next the words chemotherapy, mastectomy, and radiation were spoken. One day at a time.

The day after my diagnosis I went to a new church. It was a new beginning for me after thirty years at my previous church. I was looking for a

change. A calmness came over me as the first song we sang was "I'm gonna see a victory, for the battle belongs to You, Lord." As I left church that day, I had tears in my eyes. The pastor, who had never met me, asked me what was wrong.

I informed him of my recent diagnosis with breast cancer. He turned his back on the rest of the parishioners waiting to talk to him and pulled me aside. He prayed with me, without even knowing my name or my story.

Christmas of 2021 came with chemo treatments, losing my hair on New Year's Eve morning, shaving my head that day with a good friend just in time to celebrate at midnight with my new wig, 'Roxy.' New year, new hair, new me. Christmas came without many ribbons or bows, but it still came, and I made it to church Christmas Eve to celebrate the real meaning of Christmas.

I was usually the negative one with many anxieties. Why was I so calm? I felt God with me through every step of the way. My husband and son kept me laughing through it all and my wonderful daughters took care of me during my surgeries. With each meal that was delivered, friend that checked in, visitor that arrived, and pastor that prayed before treatment, I began to collect pieces of my life back. One day, a basket showed up from Mrs. Claus Club with wonderful items that I didn't even know I needed until I had them. It arrived along with prayers from people I did not even know. I felt a calmness that I never had before. I was the lucky one.

I survived six months of chemo treatments while working through tax season at my

husband's office. I made it through a scare when a spot on my pancreas was seen on a scan, which luckily was nothing. Then I developed a sore on my head during chemo that blew up like a volcano. I spent the summer recovering from a right mastectomy which came with drains and pains. My fall season was spent with six weeks of radiation every day. Then it was Christmas again, but my tumors were removed, and I was left scarred and bruised. There was a big hole



One of the baskets and wonderful contents cancer patients receive from the Mrs. Claus Club

under my arm on my right side where my breast and lymph nodes used to be. There was a scar where my port used to be. But again, I felt peace and hope. This is when you know God is with you.

I have a cousin that has a special gift. She has a healing touch. We gathered together on a cousin weekend, and she said she felt God was calling her to touch me and pray. All my cousins and my family gathered in a circle and prayed around me while she laid her hands on me. She said that God was going to heal me, and electricity ran through us all as we were holding hands. I was left with a peace knowing that the journey would not be easy, but God would be with me.

The following summer I had another surgery. However, it turned into a bit of a nightmare. I was supposed to look glamorous after the surgery where they were removing fat and flattening my tummy to reconstruct a breast. The seven-hour surgery turned into over fifteen hours. Without all the boring details, let's just say it was a long day with some surgery complications. I woke up with the nurses saying, "You have been through a lot, and we suggested your family go home. It's almost midnight, get some rest and they will be here in the morning." The next day, I was told I had to go back into surgery to remove a blood clot and more pieces of me. After five days I was sent home to recover. My

family took amazing care of me, but then I wound up back in the ER ten days later for an infection. This led to yet another surgery where they removed most of what was implanted, and eight more days in the hospital. I was sent home with a big hole in my breast and a wound vac tethered to me which came with an at-home nurse. It was fun having to figure out how to sleep and bathe while tethered to a machine for two months. One day at a time.

Did I mention that fifteen years ago I was diagnosed with multiple sclerosis (MS)? During my chemo, I had to stop my MS injections. So after two years of missed brain MRIs and no injections, I was concerned that my MS had progressed. A recent scan showed that my MS is in remission and no new lesions were found on my brain. It

appears the chemo might have calmed my MS for now and I do not need to return to my MS injections. God's amazing grace!

In remembrance of my journey, I am currently creating a scrapbook. It is entitled "My journey to making lemonade." We should always make lemonade out of the lemons we are given. People ask me, "Why would you want to record all the scars and tribulations into a book?" My answer is, "I need to remember what I have been through, every step. When I am feeling sad and down, I will be able to pull out my scrapbook and remind myself of what I have survived so I never forget what I have been given."

As I am writing this, it is again Christmas season and two years since my diagnosis. I am stronger and feeling very blessed. There were many signs along my journey reminding me that I am a child of God and He loves me. Does He heal all our wounds and keep our pieces from falling? No, but He is the only one who can put the pieces of life's puzzle back together. On that day in church I decided to give my battle to God. I see a victory now. So whatever comes up in the future, I know I am not alone. God puts people in your life for a reason; embrace them and know that you are loved. He will restore all your pieces and make you whole again, one day at a time.

Miracles do happen

By Debbie Eilinsfeld
Cancer Survivor



I am writing this article to bring hope and encouragement to cancer patients, and to say with surety that miracles are real. I know, because I am one!

My cancer journey started in 2013 when I was diagnosed with endometrial (uterine) cancer. My doctor was very encouraging, and told me this was not a life-ending cancer, but that I must take immediate action. I never once worried about dying, but I did ask for prayer from friends and family to help me through the surgery and radiation treatments. After a complete hysterectomy, I received 35 treatments of external radiation and one brachytherapy (internal radiation). I felt confident that the surgery, plus these treatments, had cured the disease.

Then in 2016, I was rushed to the ER with an intestinal blockage. After surgery, it was determined that I had a cancerous tumor in my colon. However, I was shocked to find out that the original endometrial cancer had come back and spread to my colon. I was diagnosed with stage four metastatic endometrial cancer. My doctor said it was not curable, and that I would die from this sooner than later. Chemo might extend my life for a few months.

I was assigned a palliative care doctor, who focused on improving the quality of my life during chemo treatments. She talked to me about depression and

getting prepared for the end of my life. However, I knew the main ONE that I needed to talk to was God. He was the ONE that had my life and healing in His hands. Since I didn't know His final plan for me, I took steps toward staying "in the land of the living." Right away my whole family and I enlisted everyone we knew, through our churches and Facebook friends, for earnest and continual prayer support. We were humbly asking God for a miracle. Ephesians 3:20 says, "God is able to do exceedingly abundantly above all we ask, according to the power that works in us." All this prayer and God's promises kept hope alive in me and sustained me during seven months of chemo.

During this time, God sent so many people to encourage and bless me. One of these special moments was a visit from Jeana Watenpool. She came to visit and to deliver a comfort basket. A friend had submitted my name to the Mrs. Claus Club to receive one of their beautiful baskets. God arranged this just at the perfect time to strengthen my faith and hope.

My husband was my greatest supporter. He spoke LIFE over me every day. The Bible verse he gave me was Psalm 118:17, which says, "I will not die, but live and declare the works of the Lord." I would speak this several times every day over my life. I also filled my mind with hope by reading about all the healing miracles that Jesus had done as recorded in the Bible. My favorite was Luke 5:12-13 "a man who was full of leprosy saw Jesus; and he fell on his face and implored Him, saying, 'Lord, if You are willing, You can make me clean.' Then He put out His hand and touched him, saying, 'I am willing; be cleansed.' Immediately the leprosy left him." I envisioned myself kneeling before Jesus saying, "Lord if You are willing, You can heal me." And then Jesus saying, "Debbie, I am willing."

By April 2017, I was very weak, sick and unable to eat. I felt like I didn't have any fight left in me. I was starting to think that God's plan might be to take me home to be with Him. My oncologist thought that I should stop the chemo for a time, which is what I did. Slowly, day by day, I started feeling better and getting stronger. My doctor took another scan, and the report came back "no evidence of the disease." The cancer was gone! That was seven years ago. I thank God every day that He

so graciously healed me, and let me live to tell my story. I believe that God let me live for the purpose of proclaiming that there is always HOPE with God, and that His miracles truly happen every day!

Head and neck reconstruction: how collaboration and innovation are changing the field

By Kevin J. Contrera, MD, MPH



The field of head and neck reconstructive surgery has undergone significant shifts over the past decade that have resulted in decreased

morbidity and improved functional outcomes. This evolution is multifactorial, but comprehensive, team-based approaches and innovative free flap techniques have been pivotal in our modern delivery of care to patients with head and neck cancer.

The growing emphasis on a team-based approach centers the patient within their care, ensuring all options and possible pathways of care are discussed with them. To achieve this, each provider involved in head and neck cancer care, from ablative and reconstructive surgeons to medical oncologists, radiation oncologists, pathologists, and radiologists, collaborate to provide optimal patient-specific treatment recommendations.

The head and neck surgeon then works with the patient using a shared medical decision-making model to finalize treatment. This process works seamlessly at the University of Pittsburgh because of long-standing, collegial relationships rooted in patient care and a desire to accelerate research.

In the operating room, specifically, increased collaboration between ablative and reconstructive teams has led to decreases in surgical time, complication rates, and hospitalization. It also presents opportunities to pivot more nimbly when technical and anatomic challenges arise.

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For additional topics on the prevention, detection and treatment of cancer, including head and neck cancer, visit www.hillmanresearch.upmc.edu/about/news/publications for archived issues of Headway.

publications for archived issues of Headway.

3D printing of mandibular and maxillary models

By Matthew E. Spector, MD, FACS

3D printing of mandibular and maxillary models helps University of Pittsburgh surgeons reconstruct complex defects to restore speaking and swallowing



A key component to the treatment of head and neck cancer is the head and neck reconstructive surgeon. After cancer treatment, whether it be surgery or radiation

therapy with or without chemotherapy, reconstruction is needed in a number of patients to restore quality of life. The discussion with the head and neck reconstructive surgeon is paramount to understanding the patient's perspective and determining their goals of reconstruction. In the Otolaryngology- Head and Neck Surgery department at UPMC, Drs. Kevin Contrera, Shaum Sridharan and Matthew Spector have those complex discussions every day. Sometimes, the goals of reconstruction are quite simple, such as restoration of speech and improving the ability to swallow after treatment. However, achieving such goals is rarely so simple. Many times, the reconstructive surgeon requires the use of skin, fat, muscle, or bone from other parts of the body to rebuild the head and neck tissues so that these goals can be attainable. When this is the case, a careful discussion around a patient's occupation and hobbies is important so that the donor tissue does not affect the long-term functional outcome.

These reconstructive choices are more important when the treatment involves the bone of the mandible or the maxilla. The goals of reconstruction during jaw replacement surgery typically involve replacing the jawbone from another bone in the body (fibula, scapula, radius) to allow for a masticatory surface for chewing, recreating the contour and shape of the jaw for facial symmetry, and restoring the function of the swallowing tract. There are additional



Examples of three-dimensional models designed and printed by UPMC to maximize fit and function in jaw reconstruction patients

reconstructive goals such as replacement of teeth for both cosmetic purposes and chewing. In prior years, these surgeries were done using freehand techniques with the surgeon trying to get the best fit of the bone, while at the same time maximizing all of these goals for this type of reconstruction.

Three-dimensional modeling and printing are not new concepts and have been applied across a number of different specialties. At UPMC, we have a cutting-edge state-of-the-art 3D printing lab run by Dr. Anish Ghodadra and his team of biomedical engineers led by Elliott Hammersley. Their ability to 3D print precise models allows the surgeon to preplan the operation including the extent of tumor removal, and then carefully plan the reconstructive portions of the procedure. The UPMC Department of Radiology builds cutting guides to help surgeons make exact cuts of the mandible or maxilla within 1 mm. Then similar guides are used on the donor site, such as the scapula or fibula, to plan the replacement of the jaw. This precision is unparalleled and ultimately leads to a better functional outcome for the patient. An additional benefit of the partnership between the Departments of Radiology and Otolaryngology-Head and Neck Surgery is the cost savings associated with performing the services in-house at UPMC.

Our current practice is that all patients to UPMC who require mandible or maxillary reconstruction undergo a thorough discussion with the head and neck surgeon for understanding their goals around the procedure and the potential donor sites that are available for this operation. We then have a planning meeting with Dr. Ghodadra and the biomedical engineering team to design the operation and to further plan the reconstructive surgery. We utilize sterile models that we bring to the operating

room to make real-time decisions and adjustments around the operation.

The overall objective is to be able to exactly replace the mandible or maxilla and restore near perfect function, and 3D modeling at UPMC brings us a big step closer to that goal.

Dental care for head and neck cancer patients

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surgeons, dentist and hygienist, a team approach to care is maintained.

The clinic where head and neck oncology patients were seen had been housed in Montefiore Hospital. The clinic is currently undergoing transition from a UPMC and University of Pittsburgh School of Dental Medicine shared *general* dental clinic to a University of Pittsburgh School of Dental Medicine *specialty* dental clinic. While the transition is on-going, Dr. Pawlowicz and Ms. Varner, along with the oral surgery and maxillofacial prosthodontic teams, have maintained the ability to work with our established and new oncology patients in the Faculty Practice clinic at the Dental School, conveniently located across the street from the hospital. It is likely that this patient population will return to the Pitt Dental Specialty Clinic at Montefiore in the future, but we are pleased that Pitt Dental School and UPMC have supported our ability to see patients in both the Survivorship Clinic and the Faculty Practice. If you are a patient who had been seen in the Montefiore Clinic and have had any difficulty with the transition, please reach out to us at 412-648-9100 and let our staff know you are an oncology patient previously seen in the Montefiore clinic.

We look forward to continuing our mission of long-term dental health for our oncology patients!

Head and neck reconstruction

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Additionally, innovations in free flap surgery have advanced the specialty considerably. With improvements in flap complication rates, care teams have been able to expand their surgical goals, making way for more ambitious aims of functional outcomes. We've seen this with increased utilization of lateral arm, ulnar artery perforator, medial sural artery perforator, and parascapular flaps. These approaches can decrease nerve injury, tendon exposure, and donor-site skin grafting while also optimizing form, function, and color-match. Flap options for bony reconstruction have also expanded, and include osteocutaneous derivations of more conventional flaps such as radial forearm and the anteriolateral thigh.

The University of Pittsburgh's head and neck cancer program has been long-recognized for pushing the boundaries in delivering exceptional care. Free flap reconstruction has become a growing emphasis of the program under the direction of Drs. José Zevallos and Matthew Spector, and I am thrilled to work towards that vision.

The bottom line is that an expanded free flap toolkit allows head and neck reconstructive surgeons to offer personalized solutions based on the patient's goals and lifestyle.

With that said, there are still opportunities to improve outcomes through surgical planning, flap monitoring, and neurotization. We are also enthused by the potential application of biomedically engineered flaps.

The culture of research and biomedical interrogation within the department and across the institution positions us to answer some of these loftier research questions — and allows us to continue advancing the field.

Head and Neck Cancer Program website

Looking for more information about patient services, current research, clinical trials, news and events, and other valuable information pertaining to head and neck cancers? Check out the website for the Head and Neck Program of UPMC Hillman Cancer Center at UPMCHillman.com/headandneck.

Contact information

American Cancer Society.....	1-800-227-2345 cancer.org
Breast Cancer Support Group - UPMC	412-647-2811
Cancer Bridges.....	412-338-1919 <i>Counseling, support groups, health and wellness, family programs</i> cancerbridges.org
Center for Counseling and Cancer Support - UPMC.....	412-623-5888
Division of Sleep Surgery - UPMC Mercy.....	412-232-3687
Monroeville.....	412-374-1260
Eye & Ear Foundation	412-864-1300 eyeandear.org
Face2Face Healing.....	724-935-3580 face2facehealing.org
Gumberg Family Library and Resource Center	412-396-6130
Hillman Cancer Center - UPMC.....	412-647-2811 <i>Research, clinical trials, referrals, patient resources, and support</i> hillman.upmc.com
Hopwood Library at UPMC Shadyside	412-623-2620
Hyperbaric Oxygen Therapy - UPMC.....	412-647-7480
Immunotherapy - Cancer Research Institute.....	800-992-2623 cancerresearch.org
Mrs. Claus Club of North Hills	412-992-7339 mrsclausclub.org
Nutrition - American Institute for Cancer Research.....	aicr.org
Prostate Cancer Support Group - UPMC.....	412-647-1062
Swallowing Disorders Center UPMC Eye & Ear Institute (Oakland).....	412-647-6461
UPMC Shadyside.....	412-621-0123
Young Adult Survivors United.....	724-719-2273 yasurvivors.org

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