



Department of Otolaryngology UPDATE

Volume 2
July 2020

WVU Otolaryngology performs first Robotic Skull Base Surgery



**Meghan
Turner, MD**

Skull base tumors are rare and grow in hard to reach places. Open surgery for these tumors puts critical structures (the brain, the optic nerves, the carotid artery and cranial nerves) at risk during surgery. Half of these tumors are benign, but still cause major problems for patients.

“Patients with these tumors find themselves between a rock and hard place,” said Meghan Turner, M.D., a fellowship-trained robotic and endoscopic head and neck surgical oncologist.

Using conventional open skull base surgery techniques, patients undergo craniotomy, lumbar drainage of spinal fluid, and often complex reconstructive surgeries that require tissue transfer from sites like the lateral thigh. For advanced cancers, this is sometimes still necessary, Turner said.

“When you have a benign tumor, that sort of solution can be worse than the problem,” she said. “Now, it doesn’t have to be.”

After training at high-volume skull base surgery and head and neck cancer centers, Dr. Turner is able to offer robotic-assisted and endoscopic-assisted approaches to hard to reach spots. Recently, she developed robotic-assisted transmaxillary surgery to prevent patients from having facial incisions or bony reconstructions. Specifically, she has pioneered the robotic-assisted transmaxillary approach to the infratemporal fossa

and the robotic-assisted contralateral transmaxillary approach to the nasopharynx, successfully performing each first-in-the-world procedure recently at WVU.

By inserting the robotic arms and endoscopic through the nose and maxillary sinus, she is able to get direct access to tumors without visible deformity or last functional problems. Previously, treatment of these tumors would require a week or more in the hospital. Now, patients are sent home by postoperative day two or three.

Turner is a strong proponent of robotic surgery for other head and neck cancers, when possible.

“Few patients are lucky enough to come with early stage cancers of the nose, sinuses, nasopharynx, oropharynx and larynx,” she said. “When they do, they now have a shot at minimally-invasive surgeries and the potential to avoid radiation or chemotherapy to the head and neck.”

Head and neck cancer care is constantly evolving at WVU. Those in the field are striving toward better survival and functional outcomes for patients.

“Not only do we want our patients to survive their cancer, we want them to live well after cancer,” Turner said. “Innovations are helping improve patient outcomes.”

A Note from the Chair

This newsletter comes on the heels of a global pandemic that has impacted our whole world as we know it. So, it is only logical for me to start by saying that I hope this note finds you and your families safe and healthy.

I know that you and our WVU community are carrying on with our academic and healthcare missions under these difficult circumstances.

Despite all that happened in recent months, the department continued to provide care to our patients, continued our educational activities and maintained our scholarly efforts. Just like all of you, we had to do things differently, but that did not prevent us from doing it well. We graduated our PGY5s for this year, hired new faculty, and on-boarded three new residents.

We continue our missions and in doing so, continue to excel despite the adversities that we may face. We have been fortunate to have a tradition of being inclusive, diverse, harmonious and have collegial culture. The department has been growing rapidly, especially in the last five years and we are positioned to continue this trend. In 2020, we will add three new faculty members and one additional resident. As we continue to invest in our program, our people and our patients, we're glad to have you along for this journey.

Stay well and safe.

Hassan H. Ramadan MD, MSc, FACS, FARS

*Stephen & Patricia Wetmore Chair of Otolaryngology
Professor, Department of Otolaryngology
Head & Neck Surgery
West Virginia University*



Welcome New Faculty



Monika Freiser, M.D. completed her residency in Otolaryngology at University of Pittsburgh Medical Center in Pittsburgh, PA in June of 2020. Dr. Freiser will be joining WVU Otolaryngology in September as a Comprehensive Otolaryngologist with interest in Sialendoscopy. She will also be the ENT Director of VA Services and Rotation in Clarksburg, W.Va.



Chadi Makary, M.D. completed his residency in Otolaryngology at the West Virginia University School of Medicine. He completed a fellowship in Rhinology and Skull Base Surgery at the Medical College of Georgia in Augusta, GA in June of 2020. He joined WVU Otolaryngology in July 2020 and specializes in advanced sinus surgery and skull base surgery as well as the care for nasal polyps, nasal tumors and chronic rhinosinusitis.



William Stokes, M.D. completed his residency in Otolaryngology at the West Virginia University School of Medicine in June of 2019. He then completed a fellowship in Head and Neck Microvascular Reconstruction at Vanderbilt Medical Center in Nashville, TN in June of 2020. Dr. Stokes is joining WVU Otolaryngology in August and will specialize in head and neck cancer, robotic surgery, reconstructive surgery and thyroid and parathyroid surgery.

Awards 2020



Service Award
Denny Peck, Medical Assistant



Teaching Award
Jason McChesney, MD

New Leadership Roles

Tanya Fancy, MD

Associate Professor
Vice Chair of Education



Monika Freiser, MD

Assistant Professor
Director of VA services



Chadi Makary, MD

Associate Professor
Vice Chair of Clinical
Services and Medical
Director



New Residents

John Behnke, MD

University of South
Carolina



Mustafa Bulbul, MD

Alfaisal University
College of Medicine



Parker Tumlin, MD

University of Tennessee



Chronic Rhinosinusitis with Nasal Polyposis: Updates on Treatment in 2020



**Chadi
Makary, MD**

At the WVU Sinus Center, state-of-the-art comprehensive medical and surgical treatments are available for chronic rhinosinusitis with nasal polyposis. Improving patients' quality of life is the goal.

Chronic rhinosinusitis (CRS) is a benign inflammatory disease that affects 5 to 15% of the population across all ages. The disease has a well-known socioeconomic burden and direct cost estimates of up to \$5 billion.

CRS can present without (CRSsNP) or with nasal polyps (CRSwNP). Patients with CRSwNP tend to be more resistant to treatment and have higher recurrence rate. CRSwNP is a heterogenous disease with different variants. One particularly recalcitrant variant is the Aspirin Exacerbated Respiratory Disease (AERD). These patients have sensitivity to aspirin and NSAIDS, asthma and nasal polyposis. Treatment paradigm for CRSwNP have shifted over the years, as the pathophysiology of the disease has become more understood. Pre-operative medical treatment is limited. Antibiotics have proven to have little role in patients with CRSwNP, as nasal polyps result from inflammatory reactions rather than infectious process. Oral corticosteroid (prednisone) has shown to temporary shrink nasal polyps in the early stages of the disease.

However, prednisone has multiple potentially serious side effects which preclude its long-term use. Intranasal corticosteroid sprays (INCS) are another effective medical management. Xhance (fluticasone propionate) is superior to other sprays because of its delivery system, which allows

more drug penetration into the sinuses. However, the presence of nasal polyps often acts as a barrier preventing the spray to be delivered.

Most patients with CRSwNP are likely to need surgical treatment. Functional endoscopic sinus surgery (FESS) aim to completely remove the nasal polyps and open all the paranasal sinuses. It has been shown that these patients benefit from wide frontal sinus drill-out (Draf 3) to increase the delivery of topical medications.

It is important to maintain medical treatment post-operatively as nasal polyps can recur. This includes normal saline sinus rinses (using sinus rinse bottle or netti pot), delivering topical corticosteroid through high volume topical budesonide irrigations and INCS. Allergy immunotherapy can also be considered in patients who test positive for inhalant allergies. In cases of AERD, aspirin desensitization through an allergist/immunologist and aspirin-free diet can be effective adjunct treatments in certain patients.

The most recent breakthrough in medical therapy of CRSwNP is the development of biologic medications. Dupilumab (Dupixent) is the only FDA-approved biologic injection for the treatment of nasal polyps. It has shown to decrease the size of polyps and improve quality of life of CRSwNP patients. It is self-injected every two weeks and has an excellent safety profile.

Graduating Residents



Habib Zalzal, MD

Beginning Fellowship July 2020 at Children's National Medical Center, Washington D.C
Pediatric Otolaryngology



Daniel O'Brien, MD

Beginning Fellowship July 2020 at University of Alberta, Edmonton, Alberta
Endoscopic Sinus and Skull Base Surgery



OTOLARYNGOLOGY LOCATIONS

Physician Office Center

1 Medical Center Drive
Morgantown, WV 26506

Suncrest Towne Centre

1065 Suncrest Towne Centre Drive
Morgantown, WV 26505

Cancer Center

1 Medical Drive
Morgantown, WV 26506

Fairmont ENT

1712 Locust Avenue
Fairmont, WV 26554

Uniontown ENT

10 Highland Park Drive
Uniontown, PA 15401

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by giving a gift:

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You can designate your gift to the following funds:

- Hassan Ramadan Otolaryngology Resident Enrichment and Alumni Engagement Fund
- Otolaryngology Pediatrics Fund
- Department of Otolaryngology Program Fund
- Stephen J. Wetmore Fund

Thank You for your support!