MEMBERS NEWS EDUCATION & RESEARCH MEETINGS JOURNAL

ARS NOSE NEWS OCTOBER 2018

TABLE OF CONTENTS

President Elect's Report
Case of the Quarter
Research & Grants Committee Update
Patient Advocacy Committee Report
Preview of Rhinoworld 2019
Friends in Research Campaign
SSS Thank You!
Corporate Supporters
ARS Contact Info

President's Report

PRESIDENT'S REPORT

Richard Orlandi, MD, FARS

The conclusion of our Fall meeting signifies the changing of the guard in our Society's leadership. And what a meeting! Congratulations to Jim Palmer, MD, FARS, and his program committee for a terrific meeting with great content and engaging discussions.

It doesn't seem that long ago I was stepping into the shoes of John DelGaudio, MD, FARS, after his superb leadership and wondering how I was going to do it. What one sees quickly is that the ARS is made up of phenomenal people who are really the core of what makes this whole Society work.

Thank you to the board members and executive committee, committee chairs for their leadership in guiding our society. Special thanks to our administrative team led by Joe Jacobs, MD, FARS. Joe and our office staff are incredibly dedicated to the ARS, something I knew before this year but only really fully appreciated as I saw how much they do and how tirelessly they do it. Pete Batra, MD, FARS, has led a task force this year to look at our administrative support and how we can maximize their efforts to position us for success for years to come. This work has been a heavy lift and all of us will benefit from Dr. Batra's group's analysis and recommendations.

I've also come to better understand how ARS presidents stand on the shoulders of

those who have gone before. Much of what we accomplished as a society this year was set in motion by previous presidents and masterfully shepherded by current ARS leaders. There are many such things but a few that merit special attention are

- Membership in the House of Delegates of the American Medical Association, with resulting direct representation in the RUC and CPT committees, a big effort directed by Joe Jacobs, MD, FARS
- Formation and operationalization of the Rhinology Training Council, to ensure high standards and transparency for fellowship programs, expertly led by David Poetker, MD, FARS
- Creation of our first ARS section, Women in Rhinology, a grassroots effort led by many but initiated and championed by Amber Luong, MD, PhD, FARS

The ARS succeeds in serving our patients and the rhinology community at large because of dedicated volunteers like these folks and like you. All of us together make the ARS strong, now and into the future.

It has been my honor to serve as president this year and I thank you for the opportunity. Best wishes to you all as we look forward to the future.

Richard R. Orlandi, MD, FARS

Back to top

PRESIDENT ELECT AND PROGRAM CHAIR'S REPORT

Jim Palmer, MD, FARS

I hope to welcome you to Atlanta for the 64th Annual American Rhinologic Society (ARS) Meeting. As your President-Elect, I'm honored to serve as the Program Chair for this 2018 meeting. This one-and-a-half-day conference will showcase the latest in Rhinologic and Skull Base discovery and innovation.

The Program Committee has reviewed over 222 abstract submissions for the meeting and we are very excited to share with you the very best of these competitive scientific presentations. I owe the Program Committee a huge debt of gratitude for their tireless work in ensuring the finest possible meeting content. Please join with me in thanking them for the fine work done on our behalf when you see them at the meeting.

The theme for this year's annual meeting is "Celebrating our Rhinologic Science". To that end, The Top 15 abstracts as selected in a blinded fashion by the Program Committee have been given 10-minute podium presentations. Special discussion sessions will follow many of these presentations to further explore the cutting-edge science we are performing as members of the ARS, the leading organization dedicated to advancing Research in Rhinology.



These Scientific Sessions will begin Friday afternoon with plenary sessions dedicated to the best of our science, followed by special topics such as "Pain in Rhinology" and the ever-entertaining film FESStival Friday evening before our Poster Session Reception. I am pleased to state that with over 100 oral and 100 poster presentations, there should be some science topics from which we all can learn. The large number of high-quality posters will also provide rich and wide-ranging educational content. I encourage you to join with your colleagues on Friday night to view these posters and meet their authors during an evening reception – we have gone "all-out" to make sure the reception will be memorable!

Saturday morning, we will breakout into 4 rooms, with a mix of panel presentations and oral abstract presentations arrayed around the themes of Basic Science in Rhinology, Sinus and Skull Base Tumors, Clinical CRS and Rhinologic Medley. An excellent lunch, available to all attendees, will take place in the exhibit hall, which will also give us a chance to thank our corporate partners for their support and will serve as a natural get together to discuss innovation and new products.

Saturday afternoon, we return to the main ballroom for a group session to end the day. One of the highlights for our Fall meeting is the annual Kennedy Lecture. Now in its 14th year, the Kennedy Lectureship has brought us the perspectives of many leaders in the field of rhinology. Noam A. Cohen, MD, PhD, FARS is the Kennedy Lecturer for 2018 and will be addressing basic science findings in the pathophysiology of CRS research. Please be sure to be there for his lecture Saturday afternoon entitled "Pathophysiology of Refractory CRS: Translating Basic Science into Clinical Outcomes"

We also are very honored to have Cherie-Ann O. Nathan, MD, as our invited guest speaker for the Women in Rhinology, Mentorship Program, and Residents and Fellows Combined Session. She will give what I am sure will be an exciting talk on "All I Really Need to Know I've Learned in Otorhinolaryngology."

I'm confident that this year's Meeting will provide all otolaryngologists interested in the field of Rhinology and Skull Base Surgery valuable content that will enhance our knowledge and will impact the care of our patients. If you happen to not be a member of the ARS, please join us to gain all of the advantages afforded to our members!

It has been an absolute pleasure to serve the members of the ARS as Program Chair. I want to welcome all our participants, and will especially look out for visitors from our guest countries of Japan, South Africa, Colombia, Portugal, and Turkey. I look forward to seeing you at our meeting here in Atlanta, and next June at RhinoWorld in Chicago!

James N. Palmer, MD, FARS

64th Annual Meeting Program Committee

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Back to top

CASE OF THE QUARTER

Nicholas R. Rowan MD, W. Alex Vandergrift MD, Rodney J. Schlosser MD, FARS, Zachary M. Soler, MD, MSc, FARS

Case Description

A 62-year-old woman with a history of macular degeneration and no other major medical issues presented to her ophthalmologist with complaints of progressive visual loss on the left. Extraocular movements and visual acuity were stable from baseline, however, visual field testing confirmed new visual field deficits on the left and magnetic resonance imaging (MRI) of the orbits was pursued. Examination revealed a heterogeneously enhancing retrobulbar lesion on the left with extension into the pterygopalatine fossa through the inferior orbital fissure (Fig 1a). A computed tomography (CT) scan revealed a rounded, homogenous lesion between the medial and inferior rectus and a nasal septal spur on the left (Fig 1b). Upon presentation to the otolaryngology clinic, the remainder of her history, physical examination and nasal endoscopy were unrevealing.



Figure 1: a) T2-weighted MRI with heterogeneously enhancing retrobulbar lesion on the patient's left with extension into the pterygopalatine fossa through the inferior orbital fissure (white arrow). b) Rounded, homogenous lesion between the medial and inferior rectus in the patient's left orbital apex (white arrow).

The differential diagnosis of this lesion included an orbital cavernous hemangioma (OCH), schwannoma, or less common orbital tumors. Given her compressive symptoms, the decision was made to pursue surgical removal.

Surgical Technique:

A video recap of the surgical technique and operation can be viewed here.



Using image guided techniques, a binaural endoscopic endonasal approach (EEA) and resection was undertaken. To begin, a conservative contralateral sphenoidotomy was performed and a nasoseptal flap was raised on that side in anticipation of orbital wall reconstruction. A directed septoplasty of an obstructing septal spur on the left (ipsilateral to lesion) was completed and subsequently, a left maxillary antrostomy and total sphenoethmoidectomy were then performed. The most anterior frontal recess ethmoid air cells were preserved. The left middle turbinate was resected and the septal mucosa on the left was then incised and reflected posteriorly into the nasopharynx while still connected to its vascular pedicle. The septectomy was completed by directed removal of bone and cartilage of the vomer and perpendicular plate. The orbit and skull base were skeletonized and at this point, a bulging area of the medial orbital wall consistent with the lesion was identified.

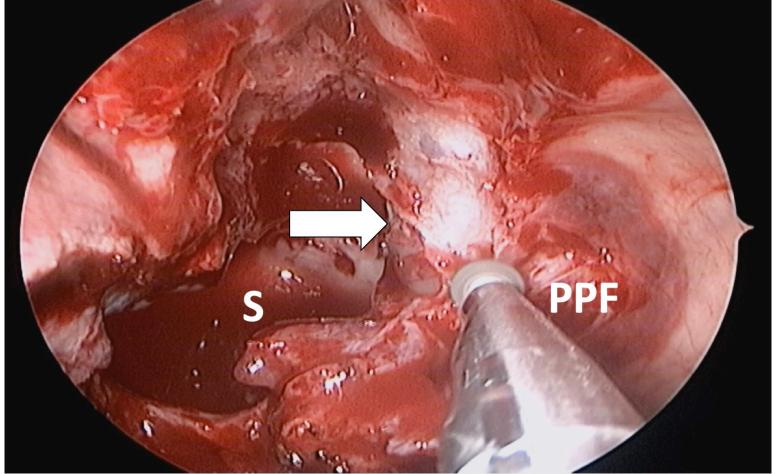


Figure 2) Identification of cavernous hemangioma (white arrow). Thinning of medial orbital wall and bone overlying pterygopalatine fossa (PPF) with diamond burr drill. Sphenoid sinus (S) posteriorly.

Using a 3mm diamond burr drill from a uninaurial approach, the medial orbital wall and thick bone of the medial pteryoid process overlying the pterygopalatine fossa (PPF) was thinned and dissected (Fig 2). The sphenopalatine artery and neurovascular bundle emanating from the PPF was identified and preserved. Once isolated, the thin bone overlying the lesion was removed. Using a binaural, 3-handed approach, the periorbita was incised over the lesion. Using blunt dissection techniques, the fibrous capsule was meticulously dissected from the lesion's surface and delivered from between the medial and inferior rectus. Fortuitously, minimal retraction of the medal rectus was required secondary to the lesion's position within the orbit. Once well-isolated, the remainder of the lesion was circumferentially dissected and grasped with cupped forceps to provide gentle retraction (Fig 3). The remaining fibrous attachments were sharply dissected and the lesion was removed.

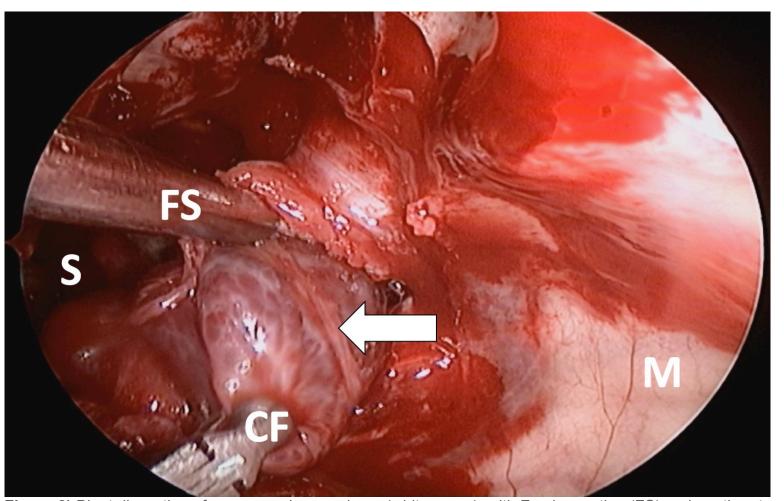


Figure 3) Blunt dissection of cavernous hemangioma (white arrow), with Frazier suction (FS) and gentle retraction with cupped forceps (CF). Sphenoid sinus (S) posteriorly, maxillary (M) sinus anteriorly.

The surgical cavity was inspected for any residual tumor or bleeding, of which there was neither. At this point, the right sided nasoseptal flap was removed from the right nasopharynx and draped across the nasopharynx to the left medial orbital wall defect in the standard fashion. A small amount of oxidized cellulose polymer dressing was used to secure the periphery of the pedicled flap, while absorbable chitosan nasal packing was conservatively placed and hydrated within the sinus cavity.

Orbital hemangioma clinical pearls:

Orbital cavernous hemangiomas (OCH) are one of the most common benign neoplasms of the orbit. 1-3 They are the most common vascular lesions of the orbit2 and oftentimes have a similar clinical and radiographic presentation to other benign orbital tumors. In recent years, OCHs have become increasingly relevant to rhinologists as the endoscopic endonasal approach has been described and gained popularity as both a safe and feasible management option for these tumors. 4,5

OCH are often discovered incidentally and are typically asymptomatic at the time of initial detection.⁶ When symptomatic, these tumors most commonly cause progressive axial proptosis, however, visual impairment may also occur from these space-occupying lesions.⁷ In rare cases, these lesions may present with a precipitous loss of visual acuity secondary to spontaneous intralesional hemorrhage.⁸ OCH are most commonly detected in women in the fourth or fifth decade of life and have an increased predilection for the left side.⁷ These lesions may grow over time6 and in rare cases have been described with extraorbital extension.⁹⁻¹¹

The combination of CT and MRI can be useful in distinguishing OCH from other orbital pathologies. On non-contrasted CT scans, OCH are typically homogenous, round or ovoid in shape and located in the retrobulbar intraconal space. Meanwhile, non-contrasted MRIs will demonstrate a lesion hypointense to fat and isointense to muscle on T1-weight imaging. T2-weighted imaging will demonstrate a lesion hyperintense to muscle and fat. The addition of intravenous contrast to both imaging studies will reveal a heterogeneous filling and enhancement pattern respectively, though the exact characteristics of the filling pattern is not as well described. 12

Traditionally, multiple corridors to the orbital apex and retrobulbar intraconal lesions have been described. The majority of these are external approaches and include the transcutaneous, transcaruncular, transconjunctival, sublabial or transcranial approach. The risk profile of each of these approaches is dictated by the critical orbital structures that must be traversed in order to gain access to the patient's pathology and is oftentimes limited by visualization and access. The first description of an endoscopic-assisted approach to the orbital apex was described in 1997. Following this, several multidisciplinary groups have detailed their experience with exclusively endoscopic endonasal approach to OCHs. 18-20

A recent systematic review highlights the many advantages of the binaural endoscopic endonasal approach and resection of OCH. The authors note that the direct access and multi-handed nature of this approach allows for comparable or improved functional outcomes as compared to traditional approaches.²⁰ This approach also allows for immediate reconstruction of the medial orbital wall in a variety of techniques, such as that described above with a pedicled, vascularized nasoseptal flap. The major technical challenges of this approach, as with many orbital apex surgeries, are the propensity for orbital fat to obscure the operative field and the potential for localized bleeding near critical structures.

Successful management of OCHs through an exclusively endoscopic endonasal corridor is both safe, feasible and may have improved functional outcomes and risk profiles as compared to traditional methods of OCH extirpation. The panoramic view and access afforded by the endoscopic approach in addition to the surgeons' intimate knowledge of intraconal and orbital apex anatomy makes these surgeries possible. As such, the unique skill sets amongst rhinologists, neurosurgeons and oculoplastic surgeons alike make this an ideal pathology to be managed with a multidisciplinary approach.

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Back to top

RESEARCH & GRANTS COMMITTEE UPDATE

Benjamin S. Bleier, MD, FARS

The Research and Grants committee would like to thank its members for their tireless efforts over the past several years. In this time, the committee has worked to improve the ARS sponsored grants program administered through the American Academy of Otolaryngology – Head and Neck Surgery Foundation (AAO-HNSF) Centralized Otolaryngology Research Efforts (CORE). These include an increase in funding of the two resident research grants from \$8,000 to \$10,000 dollars in 2018 as well as the introduction of a new "ARS Friends in Research Young Investigator Award (total award \$25,000)" to compliment the traditional ARS New Investigator Research grant. Resident grant letters of intent (LOIs) have increased from 9 to 14 per year from 2016 to 2018 while new investigator LOIs have remained stable at 7 per year over that same period. It is the hope of the committee that the introduction of the new "Friends in Research" grant, championed by the incoming ARS president James Palmer, MD, FARS, will stimulate increased submissions from the ARS community.

In addition to the CORE grant mechanism, the committee is also interested in advancing funding for rhinology research through other sources. Led by Joshua Levy, MD, MPH, FARS, the committee published a review of rhinology funding in 20171 and found a promising trend of increased National Institutes of Health funding for sinusitis-related research between 2006 and



2016 involving 9 active ARS members. Interestingly, ARS researchers received the majority of their awards from the National Institute on Deafness and Other Communication Disorders suggesting that further work needs to be done to garner commensurate federal funding from National Institute of Allergy and Infectious Diseases, the largest funder of sinusitis related research.

In conclusion, the future of both ARS sponsored and general rhinology research remains bright with trends towards increased funding coming from multiple sources. This has been clearly reflected in the ever improving quality of research being presented at ARS meetings and published in the International Forum of Rhinology and Allergy. As a committee, we hope the membership takes advantage of the new CORE funding opportunities and reminds everyone that letters of intent are due December 17, 2018.

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Back to top

PATIENT ADVOCACY COMMITTEE REPORT

Adam J. Folbe, MD, FARS Seth Brown, MD, FARS, Chair, ARS Patient Advocacy Committee

In the February 2018 issue of Otolaryngology – Head and Neck Surgery, a group led by Dr. Jay Piccirillo authored a clinical consensus statement on balloon dilation of the sinuses. An expert panel of Otolaryngologists developed statements grouped into three categories with regards to sinus ostial dilation: 1) Patient criteria, 2) Perioperative considerations, and 3) Outcomes.

After completing a survey and having a discussion amongst the authors, in the patient criteria category, 8 statements reached consensus and 12 did not. In the statements that reached consensus, with regards to computed tomography (CT) scan, they comment that CT scans should have positive findings for sinonasal disease. The authors state, that balloon dilation is not appropriate, in patients with headaches or sinonasal symptoms without evidence of sinus disease on CT scan.

Twelve statements did not meet criteria to have balloon sinus dilation. However, 3 statements reached near consensus. One statement that was closest to consensus was "Balloon dilation is appropriate as an adjunct procedure to endoscopic sinus surgery in patients with chronic rhinosinusitis (CRS) without nasal polyps". Another statement that almost reached consensus involved the use of balloon dilation in CRS with limited disease. The statement that had the lowest score and did not meet consensus addressed the appropriateness of balloon dilation as a standalone procedure in patients with CRS with nasal polyps.

Balloon sinus dilation is a very common procedure. The incidence of the procedure has increased over the last several years. The consensus statement was developed to provide Otolaryngologists with recommendations and use of evidence-based medicine when determining the best treatment for their patients. We encourage the readers to read the entire clinical consensus statement.

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Back to top

PREVIEW OF RHINOWORLD 2019

Kevin C. Welch, MD, FARS Rakesh Chandra, MD, FARS Robert C. Kern, MD, FARS

Get ready for Rhinoworld 2019, June 6-9, 2019 at the Sheraton Hotel in downtown Chicago! This is a combined international meeting involving the American Rhinologic Society (ARS), the International Rhinologic Society, and the International Symposium on Inflammation and Allergy of the Nose. The program will feature a robust spectrum of distinguished faculty from each, and the entire range of topics involving nasal, sinus, and anterior skull base disease and management will be presented. This will include allergy and immunology, pediatrics, orbital and skull base surgery, rhinoplasty, and of course, management of chronic rhinosinusitis, including basic and complicated endoscopic sinus surgery. The formal program is complemented by a host of satellite symposia and functions, including sponsored dissection labs from some of our keynote supporters, such as Olympus, Medtronic, and Karl Storz. Many of these functions will begin on June 5 and 6 during the pre-conference sessions. The pre-conference portion will also feature presentations and panels associated with the ARS Summer Sinus Symposium, which in 2019 will be held in conjunction with Rhinoworld during the morning and afternoon on Thursday, June 6. The official Rhinoworld program will begin with the opening ceremony and keynote address mid-day on that Thursday afternoon, followed by evening Cocktails on the Chicago River Walk. This will certainly be a memorable event for you and your colleagues. Friday, June 7 will feature plenary sessions and the presentation of the top 10 clinical papers in the morning, with a demonstration dissection over lunch, and panels exploring a variety of topics across nine different rooms during the afternoon. Attendees will be free to come and go between sessions to absorb topics of their likings. The format on Saturday, June 8 will be similar, although the morning will feature the top 10 basic science papers, providing balance and comprehensiveness to the program and its educational opportunities. Saturday night will include the Gala Reception at the Field Museum, one of the Chicago's most famous and storied attractions (https://www.fieldmuseum.org/). The program will conclude on Sunday with a series of panels complemented by both free clinical and basic science papers. Please stay on the lookout for details regarding abstract submission, which will open in early December. Also stay tuned for information about registration and hotel rates so you can book your accommodations soon! We look forward to seeing you in Chicago, an international city with world class style, including art, history, architecture, and dining, and entertainment for you and your family.

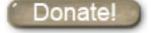
Back to top

2018 FRIENDS IN RESEARCH CAMPAIGN

The 2018 Campaign is already off to a great start and we thank the many members who have already contributed (see below). If you have not already donated, please consider making a donation today. With your support, we can continue to fund the studies that provide clinical insights valuable to the care of our patients. In the past, these efforts have helped to establish the ARS and its members as the leaders in rhinologic research. This work not only advances the care of our patients through scientific innovation, but also generates important data establishing the efficacy and cost effectiveness of our care. In the current financial landscape, this is equally important to ensure that our patients have access to the treatment necessary to address their complaints.

We thank you again for your help in this worthy endeavor!

Click to donate now and join us in our 2018 year campaign!



2018 FRIENDS IN RESEARCH*

Diamond (\$2500) Lee Mandel Pete Batra, MD, FARS Benjamin Bleier, MD, FARS Roy Casiano, MD, FARS John DelGaudio, MD, FARS Jean Anderson Eloy, MD, FARS Joseph Han, MD, FARS Peter Hwang, MD, FARS Robert Kern, MD, FARS Todd Kingdom, MD, FARS Amber Luong, MD, FARS Richard Orlandi, MD, FARS James Palmer, MD, FARS Spencer Payne, MD, FARS David Poetker, MD, FARS Douglas Reh, MD, FARS Marc Rosen, MD, FARS Rodney Schlosser, MD, FARS Michael Sillers, MD, FARS Timothy Smith, MD, FARS Michael Stewart, MD, FARS Eugenia Vining, MD Marilene Wang, MD, FARS Sarah Wise, MD, FARS

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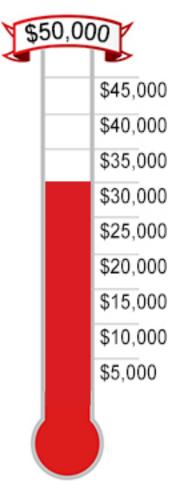
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Combined International Rhinology Meeting







For questions or more information visit RhinoWorld2019.com
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Back to top

SUMMER SINUS SYMPOSIUM THANK YOU!

Wendi Perez. ARS Administrator

Dear 2018 Summer Sinus Participants,

On behalf of the American Rhinologic Society (ARS), we want to thank you for attending and participating in this year's conference: the 7th Annual ARS - Summer Sinus Symposium 2018 "The Best Sinus Course in the World" which was held on July 12-14, 2018 in Seattle, Washington.

The more than 500 attendees and members participated and relayed positive feedback regarding the program and its faculty. We hope that you found the conference informative and worthwhile.

Your presence contributed to the huge success of the program. We wish you all the best and hope that you continue to be involved with the American Rhinologic Society (ARS). Please, stay tuned for upcoming events by visiting our website at www. American-rhinologic.org. Once again, thank you.

Sincerely,

American Rhinologic Society
Wendi Perez, Executive Administrator

Back to top

The American Rhinologic Society would like to express our deepest thanks and appreciation to the participants of our Corporate Partners Program. Our corporate partnerships have been invaluable in their support of ARS initiatives to promote excellence in rhinology and skull base surgery. Through our ongoing collaborative relationships, we hope to continue to mutually develop exciting and lasting opportunities for our members to enhance education, investigation, clinical care, and patient advocacy in the future.

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Back to top

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Back to top

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Back