

## RICHARD T. Z. DALYAI

### EDUCATION

Thomas Jefferson University Hospital <b>Cerebrovascular and Endovascular Neurosurgery Fellowship</b>	<b>2013-2014</b>
Thomas Jefferson University Hospital <b>Neurosurgery Residency</b>	<b>2009-2016</b>
Tufts University School of Medicine <b>MD</b>	<b>2005-2009</b>
Tufts University <b>B.A. Cum Laude in Political Science and Biomedical Engineering</b>	<b>2001-2005</b>

### PEER REVIEWED PUBLICATIONS

- 1) Chalouhi N, Bovenzi CD, Thakkar V, Dressler J, Jabbour P, Starke RM, Teufack S, Gonzalez LF, **Dalyai R**, Dumont AS, Rosenwasser R, Tjoumakaris S. Long-term catheter angiography after aneurysm coil therapy: results of 209 patients and predictors of delayed recurrence and retreatment. *J Neurosurg*. 2014 Sep 5:1-5.
- 2) **Dalyai RT**, Starke R, Chalouhi N, Theofanis T, Jabbour P, Gonzalez LF, Rosenwasser R, Tjoumakaris S. Smoking is a negative predictor of Arteriovenous Malformations treatment obliteration: Analysis of vascular risk factors in 835 patients. *Neurosurg Focus*. 2014 Sep;37(3):E3. doi: 10.3171/20145.FOCUS14121.
- 3) Theofanis T, Chalouhi N, **Dalyai R**, Starke RM, Jabbour P, Rosenwasser RH, Tjoumakaris S. Microsurgery for cerebral arteriovenous malformations: postoperative outcomes and predictors of complications in 264 cases. *Neurosurg Focus*. 2014 Sep;37(3):E10. doi: 10.3171/2014.7.FOCUS14160.
- 4) Ghobrial GM, Chalouhi N, Zohra M, **Dalyai RT**, Ghobrial ML, Rincon F, Flanders AE, Tjoumakaris SI, Jabbour P, Rosenwasser RH, Gonzalez F. Saving the ischemic penumbra: Endovascular Thrombolysis versus Medical Treatment. *J Clin Neurosci*. 2014 Jul 3. pii: S0967-5868(14)00291-4. doi: 10.1016/j.jocn.2014.05.013.
- 5) Ghobrial GM, Maulucci CM, Maltenfort M, **Dalyai RT**, Vaccaro AR, Fehlings MG, Street J, Arnold PM, Harrop JS. Operative and nonoperative adverse events in the management of traumatic fractures of the thoracolumbar spine: a systematic review. *Neurosurg Focus*. 2014 Jul;37(1):E8. doi: 10.3171/2014.4.FOCUS1467.
- 6) Ghobrial GM, **Dalyai RT**, Maltenfort MG, Prasad SK, Harrop JS, Sharan AD. Arachnolysis or Cerebrospinal Fluid Diversion for Adult-Onset Syringomyelia? A Systematic Review of the Literature. *World Neurosurg*. 2014 Jun 27. pii: S1878-8750(14)00590-7. doi: 10.1016/j.wneu.2014.06.044.
- 7) **Dalyai R**, Theofanis T, Starke R, Chalouhi N, Ghobrial G, Jabbour P, Dumont A, Gonzalez LF, Gordon D, Rosenwasser RH, Tjoumakaris SI. "Stereotactic Radiosurgery with Neo-Adjuvant Embolization of Larger Arteriovenous Malformations: An Institutional Experience." *Biomed Res Int*. 2014:306518
- 8) Ghobrial GM, Chalouhi N, Harrop J, **Dalyai RT**, Tjoumakaris S, Gonzalez LF, Hasan D, Rosenwasser RH, Jabbour P. Preoperative Spinal Tumor Embolization: An Institutional Experience with Onyx. *Clinical Neurology and Neurosurgery*. 2013 Dec. 115(12):2457-63.
- 9) Chalouhi N, Dressler JA, Kunkel ES, **Dalyai R**, Jabbour P, Gonzalez LF, Starke RM, Dumont AS, Rosenwasser R, Tjoumakaris S. Intravenous tissue plasminogen activator administration in community hospitals facilitated by telestroke service. *Neurosurgery*. 2013 Oct;73(4):667-71; discussion 671-2. doi: 10.1227/NEU.0000000000000073.
- 10) Chalouhi N, Jabbour P, Singhal S, Drueding R, Starke RM, **Dalyai RT**, Tjoumakaris S, Gonzalez LF, Dumont AS, Rosenwasser R, Randazzo CG. Stent-assisted coiling of intracranial aneurysms: predictors of complications, recanalization, and outcome in 508 cases. *Stroke*. 2013 May;44(5):1348-53. doi: 10.1161/STROKEAHA.111.000641.
- 11) **Dalyai RT**, Ghobrial G, Chalouhi N, Dumont AS, Tjoumakaris S, Gonzalez FL, Rosenwasser R, Jabbour P. Radiosurgery for dural arterio-venous fistulas: A review. *Clin Neurol Neurosurg*. 2013 May;115(5):512-6

- 12) **Dalyai R**, Chalouhi N, Theofanis T, Jabbour PM, Dumont AS, Gonzalez LF, Gordon DS, Rosenwasser RH, Tjoumakaris SI. Subarachnoid hemorrhage with negative initial catheter angiography: a review of 254 cases evaluating patient clinical outcome and efficacy of short- and long-term repeat angiography. *Neurosurgery*. 2013 Apr; 72(4): 646-52.
- 13) **Dalyai RT**, Chalouhi N, Singhal S, Jabbour P, Gonzalez LF, Dumont AS, Rosenwasser R, Ghobrial G, Tjoumakaris SI. Stent-assisted endovascular recanalization of extracranial internal artery occlusion in acute ischemic stroke. *World Neurosurgery*. 2013 Jan; 79(1): 143-8.
- 14) Chalouhi N, Theofanis T, Jabbour P, Dumont AS, Fernando Gonzalez L, Starke RM, **Dalyai RT**, Hann S, Rosenwasser R, Tjoumakaris S. Safety and efficacy of intraoperative angiography in craniotomies for cerebral aneurysms and arteriovenous malformations: a review of 1093 consecutive cases. *Neurosurgery*. 2012 Dec;71(6):1162-9.
- 15) Chalouhi N, Teufack S, Chandela S, **Dalyai R**, Tjoumakaris S, Hasan DM, Dumont AS, Gonzalez LF, Rosenwasser RH, Jabbour PM. Aneurysmal subarachnoid hemorrhage in patients under 35 years-old: a single-center experience. *Clinical Neurology and Neurosurgery*. 2013 Jun; 115 (6): 665-8.
- 16) Ghobrial GM, Chalouhi N, Rivers L, Witte S, Davanzo J, **Dalyai R**, Gardecki ML, Jabbour P, Gonzalez F, Dumont AS, Rosenwasser RH, Tjoumakaris S. Multimodal endovascular management of acute ischemic stroke in patients over 75 years old is safe and effective. *J Neurointerv Surg*. 2013 May;5 Suppl 1:i33-7. doi: 10.1136/neurintsurg-2012-010422.
- 17) Kung DK, Abel TJ, Madhavan KH, **Dalyai RT**, Dlouhy BJ, Liu W, Jabbour PM, Hasan DM. Treatment of endovascular coil and stent migration using the merci retriever: report of three cases. *Case Rep Med*. 2012;2012:242101. doi: 10.1155/2012/242101.
- 18) Chalouhi N, Dumont AS, Hasan D, Tjoumakaris S, Gonzalez LF, Starke RM, **Dalyai R**, El Moursi S, Rosenwasser R, Jabbour P. Is packing density important in stent-assisted coiling? *Neurosurgery*. 2012 Aug;71(2):381-6; discussion 386-7.
- 19) Chalouhi N, Dumont AS, Tjoumakaris S, Gonzalez LF, Bilyk JR, Randazzo C, Hasan D, **Dalyai RT**, Rosenwasser R, Jabbour P. The superior ophthalmic vein approach for the treatment of carotid-cavernous fistulas: a novel technique using Onyx. *Neurosurg Focus*. 2012 May;32(5):E13
- 20) Ghobrial GM, **Dalyai R**, Flanders AE, Harrop J. Nitrous oxide myelopathy posing as spinal cord injury. *J Neurosurg Spine*. 2012 May;16(5):489-91.
- 21) Amenta PS, **Dalyai RT**, Kung D, Toporowski A, Chandela S, Hasan D, Gonzalez LF, Dumont AS, Tjoumakaris SI, Rosenwasser RH, Maltenfort MG, Jabbour PM Stent-Assisted Coiling of Wide-Necked Aneurysms in the Setting of Acute Subarachnoid Hemorrhage: Experience in 65 Patients. *Neurosurgery*. 2012 Jun;70(6):1415-29; discussion 1429.
- 22) **Dalyai RT**, Ghobrial G, Awad I, Tjoumakaris S, Gonzalez LF, Dumont AS, Chalouhi N, Randazzo C, Rosenwasser R, Jabbour P Management of incidental cavernous malformations: a review.. *Neurosurg Focus*. 2011 Dec;31(6):1-5.
- 23) **Dalyai RT**, Randazzo C Ghobrial G, Gonzalez LF, Tjoumakaris SI, Dumont AS, Rosenwasser RH, Jabbour P Redefining Onyx HD 500 in the Flow Diversion Era.. *Int J Vasc Med*. 2012;2012:435490. Epub 2011 Oct 27.
- 24) **Dalyai RT**, Styliaras JC, Gonzalez LF, Tjoumakaris SI, Dumont AS, Rosenwasser RH, Jabbour P De novo basilar artery aneurysm formation after placement of a Wingspan stent.. *Acta Neurochir (Wien)*. 2011 Nov;153(11):2147-50. Epub 2011 Aug 7.
- 25) Ghobrial GM, Nair AK, **Dalyai RT**, Jabbour P, Tjoumakaris SI, Dumont AS, Rosenwasser RH, Gonzalez LF. Contrast stasis on noncontrast computed tomography as a predictor of stroke postthrombolysis. *Neurosurg Focus*. 2011 Jun;30(6):E13.
- 26) **Dalyai RT**, Schirmer CM, Malek AM. Transvenous balloon-protected embolization of a scalp arteriovenous fistula using Onyx liquid embolic. *Acta Neurochir (Wien)*. 2011 Jun;153(6):1285-90. Epub 2011 Apr 9.

## EDITORIALS, COMMENTS, AND NON-PEER REVIEWED PUBLICATIONS

**Dalyai R**, Gonzalez LF. Case Report on Intracranial Hemorrhage Related to Type I Cryoglobulinemia. *JHN Journal* Winter 2011.

**Dalyai R**, Thakkar V, Theofanis T, Jabbour P, Gonzalez LF, Rosenwasser RH, Tjoumakaris SI. Endovascular Management of Acute Proximal Internal Carotid Artery Occlusion: the JHN Experience. *JHN Journal* Spring 2011.

## LOCAL ORGANIZED MEDICAL SERVICE

**Thomas Jefferson University Hospital Comprehensive Stroke Center Committee**  
**Thomas Jefferson University Hospital Stroke Performance Improvements**

**2013**  
**2012-2013**

## MEMBERSHIP

American Association of Neurological Surgeons  
Congress of Neurological Surgeons  
Cerebrovascular AANS/CNS Joint Section  
Society of NeuroInterventional Surgery  
Pennsylvania Neurosurgical Society

## REVIEWER

American Journal of Neuroradiology

## POSTER PRESENTATIONS

CNS Annual Meeting. Boston, MA. Oct 21, 2014. "Stereotactic Radiosurgery for Ruptured Cerebral Arteriovenous Malformations: Analysis of 84 patients."

American Heart Society International Stroke Conference. Honolulu, HI Feb 14, 2013. "Correlation between Computed Tomography Perfusion (CTP) and MRI in the Setting of Acute Stroke"

AANS/CNS Cerebrovascular Joint Section Annual Meeting. San Diego, Ca. Feb 10, 2014. "Early predictors of outcome in aneurysmal SAH: Analysis of 252 patients"

Society for Neurointerventional Surgeons Annual Meeting. Miami, FL, July 29, 2013. "Flow Diversion versus Traditional Aneurysm Embolization Strategies: Analysis of Fluoroscopy and Procedure Times"

Congress of Neurosurgical Surgeons 2011 annual meeting: "Endovascular Management of Acute Proximal Internal Carotid Artery Occlusion."

Congress of Neurosurgical Surgeons 2010 annual meeting: "Stent-assisted coiling in acute subarachnoid hemorrhage."

## PODIUM PRESENTATIONS

AANS Annual Meeting 2012: Multimodality Treatment of 835 Patients with Arteriovenous Malformations: Factors Related to Complete Occlusion and Complication.

CNS/AANS Cerebrovascular Section 2012: Endovascular Embolization of Large Arteriovenous Malformations With Adjuvant Stereotactic Radiosurgery: An Institutional Experience.

Congress of Neurosurgical Surgeons 2011 annual meeting: Follow-up angiography in subarachnoid hemorrhage with negative initial angiography.

Pennsylvania Neurosurgical Society 2010 annual meeting: Stent-assisted coiling in acute subarachnoid hemorrhage.