

Prof Dr Anıl Arat

Girişimsel Radyoloji Uzmanı

İrtibat Telefonu: 0 312 292 99 00

Doğum Yeri: Ankara

Çalışma Saatleri :

Hafta İçi 15.00-18.00

Hafta Sonu: 9.00-13.00

EĞİTİM BİLGİLERİ VE KARIYERİ

Üniversite: 1988-1994 Hacettepe Üniversitesi Tıp Fakültesi

İhtisas: 1994-1999 Hacettepe Üniversitesi Tıp Fakültesi Radyoloji Anabilim Dalı

Üst ihtisas: 1999-2000 Georgetown Üniversitesi Hastanesi, Nöroradyoloji Bilim Dalı, Washington, DC, ABD

Üst ihtisas: 2001-2003 Baylor College of Medicine, Girişimsel Nöroradyoloji Bölümü, Houston, Texas, ABD

MESLEKİ DENEYİMİ

2000-2001: Girişimsel Radyoloji uzmanı, Hacettepe Üniversitesi Hastaneleri, Radyoloji Anabilim Dalı

2003-2005: Girişimsel Nöroradyoloji uzmanı, Hacettepe Üniversitesi Hastaneleri, Radyoloji Anabilim Dalı

2005-2007: Yardımcı Doçent, Baylor College of Medicine, Radyoloji Bölümü, Houston, Texas, ABD

2007-2008: Doçent, Baylor College of Medicine, Radyoloji Bölümü, Houston, Texas, ABD

2008-2010: Doçent, Wisconsin Üniversitesi Hastaneleri, Madison, Wisconsin, ABD

2010-2013: Doçent, Ankara Üniversitesi Tıp Fakültesi, Radyoloji Anabilim Dalı

2013-halen : Profesör, Hacettepe Üniversitesi Hastaneleri, Radyoloji Anabilim Dalı (halen devam ediyor)

2021- halen : Profesör, TOBB-ETÜ Hastanesi, Girişimsel Radyoloji Birimi (halen devam ediyor, mesai sonrası sözleşmeli çalışma)

TIBBİ İLGİ ALANLARI

Girişimsel nöroradyoloji

Vasküler girişimsel radyoloji

Sertifikalar:

- Nöroradyoloji sertifikası (Üst ihtisas/Amerika Birleşik Devletleri)
- Endovasküler cerrahi nöroradyoloji sertifikası (Üst ihtisas/ Amerika Birleşik Devletleri)
- European Board of Neurointervention sertifikası (Avrupa Nörogirişim Kurulu sertifikası)
- European Society of Neuroradiology girişimsel nöroradyoloji sertifikası (Avrupa Nöroradyoloji Derneği sertifikası)
- Türk Girişimsel Radyoloji Derneği sertifikası

ÜYE OLDUĞU DERNEKLER VE KURULUŞLAR

- WFITN (Dünya Girişimsel ve Terapötik Nöroradyoloji Federasyonu)
- ESNR (Avrupa Nöroradyoloji Derneği)
- Türk Girişimsel Radyoloji Derneği
- Türk Radyoloji Derneği

ARAŞTIRMA VE YAYINLARI

Hekimimizin uluslararası dergilerdeki yayınları:

- 1: Acik V, Daglioglu E, Akmangit I, Alagoz F, Sayin B, Arat A. Endovascular Treatment of Superior Cerebellar Artery Aneurysms. Turk Neurosurg. 2019;29(4):564-569. doi: 10.5137/1019-5149.JTN.24640-18.3. PMID: 30829386.
- 2: Akdemir Aktaş H, Ergun KM, Tatar İ, Arat A, Hayran KM. Evaluation of the anastomoses between the ophthalmic artery and the middle meningeal artery by superselective angiography. Surg Radiol Anat. 2020 Nov;42(11):1355-1361. doi: 10.1007/s00276-020-02546-z. Epub 2020 Aug 16. PMID: 32803306.
- 3: Akdemir Aktaş H, Ergun KM, Tatar İ, Arat A, Hayran KM. Response to "Some observations over the article "Evaluation of the anastomoses between the ophthalmic artery and the middle meningeal artery by superselective angiography"". Surg Radiol Anat. 2021 Mar;43(3):429-431. doi: 10.1007/s00276-020-02624-2. Epub 2021 Jan 3. PMID: 33388945.
- 4: Akgul E, Onan HB, Islek I, Tonge M, Durmus Y, Barburuglu M, Azizova A, Erol C, Hakyemez B, Sencer S, Aydin K, Arat A. Flow diverter stents in the treatment of recanalized intracranial aneurysms. Interv Neuroradiol. 2021 Aug;27(4):481-489. doi: 10.1177/1591019921990507. Epub 2021 Jan 28. PMID: 33509011; PMCID: PMC8580529.
- 5: Akkaya S, Akca O, Arat A, Peker A, Balci S. Usefulness of contrast-enhanced

and TOF MR angiography for follow-up after low-profile stent-assisted coil embolization of intracranial aneurysms. *Interv Neuroradiol*. 2018 Dec;24(6):655-661. doi: 10.1177/1591019918785910. Epub 2018 Jul 5. PMID: 29976108; PMCID: PMC6259350.

6: Akmangit I, Daglioglu E, Kaya T, Alagoz F, Sahinoglu M, Peker A, Derakshani S, Dede D, Belen D, Arat A. Preliminary experience with squid: a new liquid embolizing agent for AVM, AV fistulas and tumors. *Turk Neurosurg*. 2014;24(4):565-70. doi: 10.5137/1019-5149.JTN.11179-14.0. PMID: 25050683.

7: Akmangit I, Aydin K, Sencer S, Topcuoglu OM, Topcuoglu ED, Daglioglu E, Barbuoglu M, Arat A. Dual stenting using low-profile LEO baby stents for the endovascular management of challenging intracranial aneurysms. *AJNR Am J Neuroradiol*. 2015 Feb;36(2):323-9. doi: 10.3174/ajnr.A4106. Epub 2014 Sep 18. PMID: 25234031; PMCID: PMC7965656.

8: Akpek S, Arat A, Morsi H, Klucznick RP, Strother CM, Mawad ME. Self-expandable stent-assisted coiling of wide-necked intracranial aneurysms: a single-center experience. *AJNR Am J Neuroradiol*. 2005 May;26(5):1223-31. PMID: 15891189; PMCID: PMC8158593.

9: Akpınar E, Cil BE, Arat A, Baykal A, Karaman K, Balkanci F. Spontaneous recanalization of superior mesenteric artery occlusion following angioplasty and stenting of inferior mesenteric artery. *Cardiovasc Intervent Radiol*. 2006 Jan-Feb;29(1):137-9. doi: 10.1007/s00270-005-0013-4. PMID: 16195838.

10: Aktüre E, Arat A, Niemann DB, Salamat MS, Başkaya MK. Bilateral A1 fenestrations: Report of two cases and literature review. *Surg Neurol Int*. 2012;3:43. doi: 10.4103/2152-7806.94928. Epub 2012 Apr 16. PMID: 22574252; PMCID: PMC3347490.

11: Ankay Yilbas A, Kanburoglu C, Uzumcugil F, Cifci C, Saralp OO, Karagoz H, Akinci SB, Arat A. Hematoma progressivo na região anterior do pescoço após tratamento endovascular de aneurisma da artéria cerebral média [Progressive hematoma in anterior neck after endovascular treatment of middle cerebral artery aneurysm]. *Braz J Anesthesiol*. 2018 Mar-Apr;68(2):194-196. Portuguese. doi: 10.1016/j.bjan.2016.12.003. Epub 2016 Dec 23. PMID: 28024711.

12: Arat A, Islak C, Saatci I, Kocer N, Cekirge S. Endovascular parent artery occlusion in large-giant or fusiform distal posterior cerebral artery aneurysms. *Neuroradiology*. 2002 Aug;44(8):700-5. doi: 10.1007/s00234-002-0747-5. Epub 2002 Jul 17. PMID: 12185549.

13: Arat A, Cekirge S, Saatci I, Ozgen B. Transvenous injection of Onyx for casting of the cavernous sinus for the treatment of a carotid-cavernous fistula. *Neuroradiology*. 2004 Dec;46(12):1012-5. doi: 10.1007/s00234-004-1244-9. Epub 2004 Nov 9. PMID: 15536559.

14: Arat A, Cil B. Double-balloon remodeling of wide-necked aneurysms distal to the circle of Willis. *AJNR Am J Neuroradiol*. 2005 Aug;26(7):1768-71. PMID: 16091528; PMCID: PMC7975178.

- 15: Arat A, Inci S. Treatment of a superior sagittal sinus dural arteriovenous fistula with Onyx: technical case report. *Neurosurgery*. 2006 Jul;59(1 Suppl 1):ONSE169-70; discussion ONSE169-70. doi: 10.1227/01.NEU.0000220113.34075.40. PMID: 16888563.
- 16: Arat A, Daglioglu E, Akmangit I, Peker A, Arsava M, Topcuoglu MA, Belen D. Bioresorbable Vascular Scaffolds in Interventional Neuroradiology. *Clin Neuroradiol*. 2018 Dec;28(4):585-592. doi: 10.1007/s00062-017-0609-5. Epub 2017 Jul 26. PMID: 28748256.
- 17: Arat A, Haliloglu M, Cila A, Demirkazik F, Balkanci F. Demonstration of ureterosciatic hernia with spiral CT. *J Comput Assist Tomogr*. 1996 Sep-Oct;20(5):816-8. doi: 10.1097/00004728-199609000-00028. PMID: 8797922.
- 18: Arat A, Midia M, Oztürk H, Unal B, Aydingöz U, Unsal M. Urethro-vaso-cutaneous fistula in a 5-year-old child. *Pediatr Radiol*. 1997 Jan;27(1):11-3. doi: 10.1007/s002470050052. PMID: 8995158.
- 19: Arat A, Haliloglu M. Ureteral-sciatic hernia in a child demonstrated by voiding cystography. *J Urol*. 1998 Jul;160(1):157-8. PMID: 9628638.
- 20: Arat A, Cekirge HS, Saatci I. Gadodiamide as an alternative contrast medium in cerebral angiography in a patient with sensitivity to iodinated contrast medium. *Neuroradiology*. 2000 Jan;42(1):34-7; discussion 37-9. doi: 10.1007/s002340050007. PMID: 10663467.
- 21: Arat A, Cekirge HS, Saatci I I. Reply. *Neuroradiology*. 2000 Jan;42(1):38-9. doi: 10.1007/s002340050009. PMID: 10663469.
- 22: Arat A, Cil BE, Vargel I, Turkbey B, Canyigit M, Peynircioglu B, Arat YO. Embolization of high-flow craniofacial vascular malformations with onyx. *AJNR Am J Neuroradiol*. 2007 Aug;28(7):1409-14. doi: 10.3174/ajnr.A0547. PMID: 17698554; PMCID: PMC7977660.
- 23: Arat A, Turkbey B, Cil BE, Canyigit M, Cekirge S. Emergent treatment of an iatrogenic arterial injury at femoral puncture site With Symbiot self-expanding PTFE-covered coronary stent-graft. *Australas Radiol*. 2007 Dec;51 Suppl:B331-3. doi: 10.1111/j.1440-1673.2007.01849.x. PMID: 17991099.
- 24: Arat YO, Arat A, Aydin K. Angiographic Morphometry of Internal Carotid Artery Circulation in Turkish Children. *Turk Neurosurg*. 2015;25(4):608-16. doi: 10.5137/1019-5149.JTN.13788-14.1. PMID: 26242339.
- 25: Arat YO, İnam O, Yavas GF, Arat A. The role of choroidal optical coherence tomography for follow-up of carotid cavernous fistula with anterior drainage. *Eye (Lond)*. 2021 Aug 18. doi: 10.1038/s41433-021-01744-2. Epub ahead of print. PMID: 34408315.
- 26: Arsava EM, Arat A, Topcuoglu MA, Peker A, Yemisci M, Dalkara T. Angiographic Microcirculatory Obstructions Distal to Occlusion Signify Poor Outcome after Endovascular Treatment for Acute Ischemic Stroke. *Transl Stroke Res*. 2018 Feb;9(1):44-50. doi: 10.1007/s12975-017-0562-2. Epub 2017 Aug 19. PMID:

28825223.

27: Arsava EM, Hansen MB, Kaplan B, Peker A, Gocmen R, Arat A, Oguz KK, Topcuoglu MA, Østergaard L, Dalkara T. The effect of carotid artery stenting on capillary transit time heterogeneity in patients with carotid artery stenosis. *Eur Stroke J.* 2018 Sep;3(3):263-271. doi: 10.1177/2396987318772686. Epub 2018 Apr 26. PMID: 31008357; PMCID: PMC6453199.

28: Asil S, Kaya B, Canpolat U, Yorgun H, Şahiner L, Çöteli C, Arat A, Aytemir K. Septal reduction therapy using nonalcohol agent in hypertrophic obstructive cardiomyopathy: Single center experience. *Catheter Cardiovasc Interv.* 2018 Sep 1;92(3):557-565. doi: 10.1002/ccd.27442. Epub 2017 Dec 5. PMID: 29205803.

29: Aydin K, Arat A, Sencer S, Hakyemez B, Barburuglu M, Sencer A, İzgi N. Treatment of ruptured blood blister-like aneurysms with flow diverter SILK stents. *J Neurointerv Surg.* 2015 Mar;7(3):202-9. doi: 10.1136/neurintsurg-2013-011090. Epub 2014 Feb 3. PMID: 24491271.

30: Aydin K, Balci S, Sencer S, Barburuglu M, Umutlu MR, Arat A. Y-Stent-Assisted Coiling With Low-Profile Neuroform Atlas Stents for Endovascular Treatment of Wide-Necked Complex Intracranial Bifurcation Aneurysms. *Neurosurgery.* 2020 Sep 15;87(4):744-753. doi: 10.1093/neuros/nyz516. PMID: 31807780.

31: Aydin K, Karabulut N, Demirkazik F, Arat A. Pulmonary involvement in adult Gaucher's disease: high resolution CT appearance. *Br J Radiol.* 1997 Jan;70:93-5. doi: 10.1259/bjr.70.829.9059303. PMID: 9059303.

32: Aydin K, Arat A, Sencer S, Barburuglu M, Men S. Stent-Assisted Coiling of Wide-Neck Intracranial Aneurysms Using Low-Profile LEO Baby Stents: Initial and Midterm Results. *AJNR Am J Neuroradiol.* 2015 Oct;36(10):1934-41. doi: 10.3174/ajnr.A4355. Epub 2015 May 28. PMID: 26021624; PMCID: PMC7965021.

33: Balci S, Arat A. Unusual ophthalmic artery origin: Implications for intraarterial chemotherapy of retinoblastoma. *Interv Neuroradiol.* 2019 Dec;25(6):638-643. doi: 10.1177/1591019919852737. Epub 2019 Jun 3. PMID: 31159631; PMCID: PMC6838853.

34: Balci S, Arsava EM, Topcuoglu MA, Arat A. Floating Aortic Thrombus: A Rare Cause of Acute Ischemic Stroke Necessitating Modification of Access Route for Thrombectomy. *J Stroke Cerebrovasc Dis.* 2019 Nov;28(11):104291. doi: 10.1016/j.jstrokecerebrovasdis.2019.07.007. Epub 2019 Aug 21. PMID: 31445856.

35: Baltacıoğlu F, Cekirge S, Saatci I, Öztürk H, Arat A, Pamir N, Özgen T. Distal middle cerebral artery aneurysms. Endovascular treatment results with literature review. *Interv Neuroradiol.* 2002 Dec 22;8(4):399-407. doi: 10.1177/159101990200800409. Epub 2004 Oct 20. PMID: 20594501; PMCID: PMC3572496.

36: Barburuglu M, Arat A. Flow Diverters in the Treatment of Pediatric Cerebrovascular Diseases. *AJNR Am J Neuroradiol.* 2017 Jan;38(1):113-118. doi: 10.3174/ajnr.A4959. Epub 2016 Oct 20. PMID: 27765738; PMCID: PMC7963647.

- 37: Batur H, Topcuoglu MA, Balci S, Arsava EM, Arat A. Dual Testing to Achieve Low On-treatment Platelet Reactivity for Aneurysm Embolization. Clin Neuroradiol. 2021 Dec;31(4):1159-1165. doi: 10.1007/s00062-021-01011-7. Epub 2021 Apr 12. PMID: 33844028.
- 38: Canyigit M, Arat A, Cil BE, Sahin G, Turkbey B, Elibol B. Management of vertebral stenosis complicated by presence of acute thrombus. Cardiovasc Intervent Radiol. 2007 Mar-Apr;30(2):317-20. doi: 10.1007/s00270-006-0016-9. PMID: 16988872.
- 39: Canyigit M, Arat A, Cil BE, Turkbey B, Saatci I, Cekirge S, Balkanci F. Distal embolization after stenting of the vertebral artery: diffusion-weighted magnetic resonance imaging findings. Cardiovasc Intervent Radiol. 2007 Mar-Apr;30(2):189-95. doi: 10.1007/s00270-005-0384-6. PMID: 17200903.
- 40: Cay F, Peker A, Arat A. Stent-assisted coiling of cerebral aneurysms with the Neuroform Atlas stent. Interv Neuroradiol. 2018 Jun;24(3):263-269. doi: 10.1177/1591019917753710. Epub 2018 Jan 19. PMID: 29350091; PMCID: PMC5967178.
- 41: Cay F, Cil BE, Balci S, Arsava EM, Topcuoğlu MA, Arat A. Relevance of Distal Arterial Collapse in Stenting of Atherosclerotic Near-Occlusion of the Carotid Artery. AJNR Am J Neuroradiol. 2020 Jun;41(6):1054-1060. doi: 10.3174/ajnr.A6570. Epub 2020 Jun 4. PMID: 32499248; PMCID: PMC7342746.
- 42: Cekirge HS, Saatci I, Ozturk MH, Cil B, Arat A, Mawad M, Ergungor F, Belen D, Er U, Turk S, Bavbek M, Sekerci Z, Beskonakli E, Ozcan OE, Ozgen T. Late angiographic and clinical follow-up results of 100 consecutive aneurysms treated with Onyx reconstruction: largest single-center experience. Neuroradiology. 2006 Feb;48(2):113-26. doi: 10.1007/s00234-005-0007-6. Epub 2006 Jan 4. PMID: 16391915.
- 43: Cil BE, Akmangit I, Arat A, Cekirge S, Saatçi I. Serebral anevrizmalarda endosakküler Onyx injeksiyonu ve parent arter rekonstrüksiyonu tekniği ile endovasküler tedavi [Endosaccular Onyx injection and endovascular treatment with parent artery reconstruction technique in cerebral aneurysms]. Tani Girişim Radyol. 2004 Mar;10(1):59-68. Turkish. PMID: 15054707.
- 44: Cil BE, Ucar I, Ozsoy F, Arat A, Yorgancioglu C, Böke E. Successful endovascular treatment of a left common carotid artery aneurysm following failed surgery of a right common carotid artery aneurysm. Cardiovasc Intervent Radiol. 2005 May-Jun;28(3):367-71. doi: 10.1007/s00270-004-0097-2. PMID: 15886926.
- 45: Cil B, Topcuoglu OM, Peynircioglu B, Arat A, Vargel I. Percutaneous Treatment of Scalp Arteriovenous Fistulas by Direct Puncture and Polydocanol Sclerotherapy : Report of 2 Cases with Long-term Follow-up. Clin Neuroradiol. 2018 Dec;28(4):609-612. doi: 10.1007/s00062-017-0653-1. Epub 2017 Dec 19. PMID: 29260255.
- 46: Coskun U, Orta Kilickesmez K, Abaci O, Kocas C, Bostan C, Yildiz A, Baskurt M, Arat A, Ersanli M, Gurmen T. The relationship between chronic kidney disease and SYNTAX score. Angiology. 2011 Aug;62(6):504-8. doi: 10.1177/0003319711398864. Epub 2011 Mar 21. PMID: 21422054.

- 47: Daglioglu E, Akmangit I, Acik V, Alagoz F, Sayin B, Uckun OM, Belen AD, Arat A. The Experience of the Derivo® Embolisation Device in Intracranial Aneurysms. *Turk Neurosurg.* 2020;30(1):30-37. doi: 10.5137/1019-5149.JTN.25776-19.2. PMID: 31049921.
- 48: Dandapat S, Mendez-Ruiz A, Martínez-Galdámez M, Macho J, Derakhshani S, Foa Torres G, Pereira VM, Arat A, Wakhloo AK, Ortega-Gutierrez S. Review of current intracranial aneurysm flow diversion technology and clinical use. *J Neurointerv Surg.* 2021 Jan;13(1):54-62. doi: 10.1136/neurintsurg-2020-015877. Epub 2020 Sep 25. PMID: 32978269.
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- 50: Eldem G, Erdoğan E, Peynircioğlu B, Arat A, Balkancı F. Endovascular treatment of true renal artery aneurysms: a single center experience. *Diagn Interv Radiol.* 2019 Jan;25(1):62-70. doi: 10.5152/dir.2018.17354. PMID: 30272561; PMCID: PMC6339632.
- 51: Enar R, Pehlivanoglu S, Uzunhasan I I, Arat A, Yildiz A, Yaziciooglu N. The Relation Between Early Ventricular Tachycardia and QT Dispersion in Patients with Acute Myocardial Infarction Treated with Thrombolytic Therapy. *Int J Angiol.* 2001 Jan;10(1):58-62. doi: 10.1007/BF01616348. PMID: 11178791.
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- 53: Eroglu U, Kahilogullari G, Demirel A, Arat A, Unlu A. Fahr's Syndrome Associated with Multiple Intracranial Aneurysms: A Case Report. *Turk Neurosurg.* 2016;26(4):643-645. doi: 10.5137/1019-5149.JTN.8574-13.0. PMID: 27306481.
- 54: Eroglu U, Kahilogullari G, Demirel A, Arat A, Unlu A. Fahr's Syndrome Associated with Multiple Intracranial Aneurysms: A Case Report. *Turk Neurosurg.* 2016;26(4):643-5. doi: 10.5137/1019-5149.JTN.8574-13.0. PMID: 27400114.
- 55: Gurkas E, Kaya T, Daglioglu E, Akmangit I, Belen D, Peker A, Dede D, Arat A. Silk Device for the Treatment of Intracranial Aneurysms. Part 1: Peri-Procedural Results, Technical Aspects and Learning Curve. *Turk Neurosurg.* 2016;26(4):525-32. doi: 10.5137/1019-5149.JTN.14759-15.0. PMID: 27400098.
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- 57: Halitcan B, Bige S, Sinan B, Ilkay A, Ergun D, Fatih A, Anil A. The implications of magnetic resonance angiography artifacts caused by different

types of intracranial flow diverters. *J Cardiovasc Magn Reson*. 2021 Jun 7;23(1):69. doi: 10.1186/s12968-021-00753-0. PMID: 34092251; PMCID: PMC8182930.

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60: Kahilogullari G, Bahadır B, Bozkurt M, Akcalar S, Balci S, Arat A. Carotid Artery-Cavernous Segment Injury during an Endoscopic Endonasal Surgery: A Case Report and Literature Review of the Overlooked Option for Surgical Trapping in the Hyperacute Phase. *J Neurol Surg Rep*. 2021 Dec 14;82(4):e53-e62. doi: 10.1055/s-0041-1740511. PMID: 34917447; PMCID: PMC8670996.

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