MONTERIS MEDICAL

LASER INTERSTITIAL THERMAL THERAPY (LITT) FOR BRAIN

CLINICAL BIBLIOGRAPHY

BRAIN TUMOR & ONCOLOGY | EPILEPSY

BRAIN TUMOR & ONCOLOGY ARTICLES

Article Citation	Year	Disease State	Link to Article
Merenzon MA, Levy AS, Bhatia S, Rivera C, Morell AA, Semonche A, Daggubati LC, Luther E, Komotar RJ, Shah AH, Ivan ME. Towards the definition of progressive disease in brain metastasis treated with laser ablation: an evidence-based study. J Neurooncol. 2023 Jun 12.	2023	Brain metastasis	doi: 10.1007/s11060-023-04360-0
Spacca B, Di Maurizio M, Grandoni M, Tempesti S, Genitori L. Laser interstitial thermal therapy (LITT) for pediatric patients affected by intracranial tumors. Front Neurol. 2023 Apr 20;14:1120286.	2023	Pediatric Glioma	doi.org/10.3389/fneur.2023.1120286
Chan M, Tatter S, Chiang V, et al. Efficacy of Laser Interstitial Thermal Therapy (LITT) for Biopsy-Proven Radiation Necrosis in Radiographically Recurrent Brain Metastases. Neuro-Oncol Adv. Published online March 28, 2023:vdad031.	2023	Radiation necrosis	doi:10.1093/noajnl/vdad031
Haskell-Mendoza AP, Srinivasan ES, Suarez AD, Fecci PE. Laser ablation of a sphenoid wing meningioma: A case report and review of the literature. Surg Neurol Int. 2023;14:138.	2023	Meningioma	doi: 10.25259/SNI_1000_2022
Scherschinski, L, Jubran J, Shaftel K, et al. Magnetic Resonance-Guided Laser Interstitial Thermal Therapy for Management of Low-Grade Gliomas and Radiation Necrosis: A Single-Institution Case Series. Brain sciences vol. 12,12 1627. 28 Nov. 2022.	2022	Low-grade glioma	doi:10.3390/brainsci12121627
Cross K, Salehi A, Abdelbaki M, et al. MRI-guided laser interstitial thermal therapy for deep-seated gliomas in children with neurofibromatosis type 1: report of two cases. Child's nervous system : ChNS : official journal of the International Society for Pediatric Neurosurgery, 10.1007/s00381-022-05660-y. 15 Sep. 2022.	2022	Glioma (neurofibromatosis type 1)	doi:10.1007/s00381-022-05660-y
Fadel H, Haider S, Pawloski J, et al. Laser Interstitial Thermal Therapy for First-Line Treatment of Surgically Accessible Recurrent Glioblastoma: Outcomes Compared With a Surgical Cohort. Neurosurgery vol. 91,5 (2022): 701-709.	2022	Glioblastoma	doi:10.1227/neu.0000000000002093
Muir M, Traylor J, Gadot R, et al. Repeat laser interstitial thermal therapy for recurrent primary and metastatic intracranial tumors. Surgical neurology international vol. 13 311. 22 Jul. 2022.	2022	Primary and metastatic	doi:10.25259/SNI_418_2022
Fomchenko E, Leelatian N, Darbinyan A, et al. Histological changes associated with laser interstitial thermal therapy for radiation necrosis: illustrative cases. Journal of neurosurgery. Case lessons vol. 4,1 CASE21373. 4 Jul. 2022.	2022	Radiation necrosis	doi:10.3171/CASE21373
Riviere-Cazaux C, Bhandarkar A, Rahman M, et al. Outcomes and Principles of Patient Selection for Laser Interstitial Thermal Therapy for Metastatic Brain Tumor Management: A Multisite Institutional Case Series. World neurosurgery vol. 165 (2022): e520-e531.	2022	Brain metastasis	doi:10.1016/j.wneu.2022.06.095
Peña Pino I, Hori Y, Fomchenko E, et al. Stereotactic Laser Ablation (SLA) followed by consolidation stereotactic radiosurgery (cSRS) as treatment for brain metastasis that recurred locally after initial radiosurgery (BMRS): a multi-institutional experience. Journal of neuro-oncology vol. 156,2 (2022): 295-306.	2022	Brain metastasis	doi:10.1007/s11060-021-03893-6
de Groot JF, Kim AH, Prabhu S, et al. Efficacy of Laser Interstitial Thermal Therapy (LITT) for Newly Diagnosed and Recurrent *IDH* Wild-type Glioblastoma. Neuro-Oncology Advances. Published online April 6, 2022.	2022	Glioblastoma	doi: 10.1093/noajnl/vdac040

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Grabowski MM, Srinivasan ES, Vaios EJ, Sankey EW, Otvos B, Krivosheya D, Scott A, Olufawo M, Ma J, Fomchenko EI, Herndon JE, Kim AH, Chiang VL, Chen CC, Leuthardt EC, Barnett GH, Kirkpatrick JP, Mohammadi AM, Fecci PE. Combination laser interstitial thermal therapy plus stereotactic radiotherapy increases time to progression for biopsy-proven recurrent brain metastases. Neurooncol Adv. 2022 Jun 2;4(1):vdac086. eCollection 2022 Jan-Dec.	2022	Brain Metastases	doi: 10.1093/noajnl/vdac086
Sankey EW, Grabowski MM, Srinivasan ES, Griffin AS, Howell EP, Otvos B, Tsvankin V, Barnett GH, Mohammadi AM, Fecci PE. Time to Steroid Independence After Laser Interstitial Thermal Therapy vs Medical Management for Treatment of Biopsy-Proven Radiation Necrosis Secondary to Stereotactic Radiosurgery for Brain Metastasis. Neurosurgery. 2022 Jun 1;90(6):684-690. Epub 2022 Mar 23.	2022	Brain Metastases	doi: 10.1227/neu.0000000000001922
Butt O, Zhou A, Huang J, et al. A phase II study of laser interstitial thermal therapy combined with doxorubicin in patients with recurrent glioblastoma. Neuro-oncology advances vol. 3,1 vdab164. 15 Nov. 2021.	2021	Glioblastoma	doi:10.1093/noajnl/vdab164
Lanier C, Lecompte M, Glenn C, et al. "A Single-Institution Retrospective Study of Patients Treated With Laser-Interstitial Thermal Therapy for Radiation Necrosis of the Brain." Cureus vol. 13,11 e19967. 28 Nov. 2021.	2021	Radiation necrosis	doi:10.7759/cureus.19967
Di L, Wang CP, Shah AH, Eichberg DG, Semonche AM, Sanjurjo AD, Luther EM, Jermakowicz WJ, Komotar RJ, Ivan ME. A Cohort Study on Prognostic Factors for Laser Interstitial Thermal Therapy Success in Newly Diagnosed Glioblastoma. Neurosurgery. 2021 Aug 16;89(3):496-503.	2021	Glioblastoma	doi: 10.1093/neuros/nyab193
Muir M, Patel R, Traylor JI, de Almeida Bastos DC, Kamiya C, Li J, Rao G, Prabhu SS. Laser interstitial thermal therapy for newly diagnosed glioblastoma. Lasers Med Sci. 2021 Oct 23. Epub ahead of print.	2021	Glioblastoma	doi: 10.1007/s10103-021-03435-6
Parsons MW, Peters KB, Floyd SR, Brown P, Wefel JS. Preservation of neurocognitive function in the treatment of brain metastases. Neurooncol Adv. 2021;3(Suppl 5):v96-v107.	2021	Brain Metastases	doi: 10.1093/noajnl/vdab122
Traylor JI, Patel R, Muir M, de Almeida Bastos DC, Ravikumar V, Kamiya-Matsuoka C, Rao G, Thomas JG, Kew Y, Prabhu SS. Laser Interstitial Thermal Therapy for Glioblastoma: A Single-Center Experience. World Neurosurg. 2021 May;149:e244-e252. Epub 2021 Feb 19.	2021	Glioblastoma	doi: 10.1016/j.wneu.2021.02.044
Arocho-Quinones E, Lew S, Handler M, et al. Magnetic resonance-guided stereotactic laser ablation therapy for the treatment of pediatric brain tumors: a multiinstitutional retrospective study. J Neurosurg Pediatr. 2020 Mar 27.	2020	Pediatric primary, pediatric metastatic	doi: 10.3171/2020.1.PEDS19496
de Almeida Bastos, D, Weinberg, J, Jumar V et al. Laser interstitial thermal therapy in the treatment of brain metastases and radiation necrosis. Cancer Letters. 2020 October:489(1):9-18.	2020	Metastasis, radiation necrosis	doi: 10.1016/j.canlet.2020.05.014
Ginalis E, Danish S. Magnetic resonance-guided laser interstitial thermal therapy for brain tumors in geriatric patients. Neurosurg Focus. 2020 Oct:49(4):E12.	2020	Glioblastoma	doi: 10.3171/2020.7.FOCUS20462
Grabowski M, Otvos B, Mohammadi A. Stereotactic laser ablation of glioblastoma. Neurosurg Clin N Am. Epub 2020 Nov 5.	2020	Glioblastoma	doi: 10.1016/j.nec.2020.08.006
Hong CS, Kundishora AJ, Elsamadicy AA, et al. Laser interstitial thermal therapy in neuro-oncology applications. Surg Neurol Int. 2020 Aug 8;11:231.	2020	Glioblastoma, primary, metastatic	doi: 10.25259/SNI_496_2019

BRAIN TUMOR & ONCOLOGY ARTICLES

Article Citation	Year	Disease State	Link to Article
Kim AH, Tatter S, Rao G, et al. Laser Ablation of Abnormal Neurological Tissue Using Robotic NeuroBlate System (LAANTERN): 12-month outcomes and quality of life after brain tumor ablation. Neurosurgery. 2020 April 21: nyaa071.	2020	Glioblastoma, primary, metastatic, radiation necrosis	doi: 10.1093/neuros/nyaa071
Shao J, Radakovich N, Grabowski M, et al. Lessons learned in using Laser Interstitial Thermal Therapy (LITT) for treatment of brain tumors: A case series of 238 patients from a single institution. World Neurosurgery. 2020 April 13.	2020	Glioblastoma, radiation necrosis	doi: 10.1016/j.wneu.2020.03.213
Sujijantarat, N., Hong, C.S., Owusu, K.A. et al. Laser Interstitial Thermal Therapy (LITT) vs. bevacizumab for radiation necrosis in previously irradiated brain metastases. J Neurooncol 148, 641–649 (2020).	2020	Radiation necrosis, metastatic	doi: 10.1007/s11060-020-03570-0
Alattar AA, Bartek J, Chiang VL, et al. Stereotactic laser ablation as treatment of brain metastases recurring after stereotactic radiosurgery: a systematic literature review. World Neurosurgery. 2019;128:134-142.	2019	Metastatic, radiation necrosis, recurrent	doi: 10.1016/j.wneu.2019.04.200
Bastos DCA, Rao G, Oliva ICG, et al. Predictors of local control of brain metastasis treated with laser interstitial thermal therapy. Neurosurgery. 2020 July;87(1): 112 – 122.	2019	Metastatic, radiation necrosis	doi: 10.1093/neuros/nyz357
Hong CS, Deng D, Vera A, Chiang VL. Laser-interstitial thermal therapy compared to craniotomy for treatment of radiation necrosis or recurrent tumor in brain metastases failing radiosurgery. Journal of Neuro-Oncology. 2019;142(2):309-317.	2019	Metastatic, radiation necrosis, recurrent	doi: 10.1007/s11060-019-03097-z
Jermakowicz WJ, Mahavadi AK, Cajigas I, et al. Predictive modeling of brain tumor laser ablation dynamics. J Neurooncol. 2019 Aug;144(1):193-203.	2019	Metastatic, primary	doi: 10.1007/s11060-019-03220-0
Kamath AA, Friedman DD, Akbari SHA, et al. Glioblastoma treated with magnetic resonance imaging-guided laser interstitial thermal therapy: Safety, efficacy, and outcomes. Neurosurgery. 2019 Apr 1;84(4):836-843.	2019	Glioblastoma	doi: 10.1093/neuros/nyy375
Rennert RC, Khan U, Bartek J, et al. Laser Ablation of Abnormal Neurological Tissue Using Robotic Neuroblate System (LAANTERN): procedural safety and hospitalization. Neurosurgery. May 2019.	2019	Glioblastoma, metastatic, recurrent	doi: 10.1093/neuros/nyz141
Shah AH, Semonche A, Eichberg DG, et al. The role of laser interstitial thermal therapy in surgical neuro-oncology: Series of 100 consecutive patients. Neurosurgery. 2019 Nov 19. pii: nyz424.	2019	Metastatic, primary, radiation necrosis	doi: 10.1093/neuros/nyz424
Ahluwalia M, Barnett GH, Deng D, et al. Laser ablation after stereotactic radiosurgery: a multicenter prospective study in patients with metastatic brain tumors and radiation necrosis. J Neurosurg. April 2018:1-8.	2018	Metastatic, radiation necrosis, recurrent	doi: 10.3171/2017.11.JNS171273
Kamath AA, Friedman DD, Akbari SHA, et al. Glioblastoma treated with magnetic resonance imaging-guided laser interstitial thermal therapy: safety, efficacy, and outcomes. Neurosurgery. August 2018.	2018	Glioblastoma, recurrent	doi: 10.1093/neuros/nyy375

BRAIN TUMOR & ONCOLOGY ARTICLES

Article Citation	Year	Disease State	Link to Article
Mohammadi AM, Sharma M, Beaumont TL, et al. Upfront magnetic resonance imaging-guided stereotactic laser-ablation in newly diagnosed glioblastoma: a multicenter review of survival outcomes compared to a matched cohort of biopsy-only patients. Neurosurgery. November 2018.	2018	Glioblastoma	doi: 10.1093/neuros/nyy449
Rennert RC, Khan U, Tatter SB, et al. Patterns of clinical use of stereotactic laser ablation: analysis of a multicenter prospective registry. World Neurosurg. 2018;116:e566-e570.	2018	Epilepsy, glioblastoma, metastatic, radiation necrosis	doi: 10.1016/j.wneu.2018.05.039
Beechar VB, Prabhu SS, Bastos D, et al. Volumetric response of progressing post-SRS lesions treated with laser interstitial thermal therapy. J Neurooncol. December 2017.	2017	Metastatic, recurrent	doi: 10.1007/s11060-017-2694-3
Chaunzwa TL, Deng D, Leuthardt EC, et al. Laser thermal ablation for metastases failing radiosurgery: a multicentered retrospective study. Neurosurgery. April 2017.	2017	Metastatic, radiation necrosis	doi: 10.1093/neuros/nyx142
Kamath AA, Friedman DD, Hacker CD, et al. MRI-guided interstitial laser ablation for intracranial lesions: a large single-institution experience of 133 cases. Stereotact Funct Neurosurg. 2017;95(6):417-428.	2017	Glioblastoma, metastatic, radiation necrosis, recurrent, other	doi: 10.1159/000485387
Lagman C, Chung LK, Pelargos PE, et al. Laser neurosurgery: a systematic analysis of magnetic resonance-guided laser interstitial thermal therapies. J Clin Neurosci. 2017;36:20-26.	2017	Epilepsy, unspecified tumor	doi: 10.1016/j.jocn.2016.10.019
Barnett GH, Voigt JD, Alhuwalia MS. A systematic review and meta-analysis of studies examining the use of brain laser interstitial thermal therapy versus craniotomy for the treatment of high-grade tumors in or near areas of eloquence: an examination of the extent of resection and major complication rates associated with each type of surgery. Stereotact Funct Neurosurg. 2016;94(3):164-173.	2016	Recurrent, other	doi: 10.1159/000446247
Leuthardt EC, Duan C, Kim MJ, et al. Hyperthermic laser ablation of recurrent glioblastoma leads to temporary disruption of the peritumoral blood brain barrier. PloS One. 2016;11(2):e0148613.	2016	Glioblastoma, recurrent	doi: 10.1371/journal.pone.0148613
Leuthardt EC, Voigt J, Kim AH, et al. A single-center cost analysis of treating primary and metastatic brain cancers with either brain Laser Interstitial Thermal Therapy (LITT) or craniotomy. PharmacoEconomics - Open. November 2016.	2016	Metastatic, unspecified primary tumor	doi: 10.1007/s41669-016-0003-2
Patel P, Patel NV, Danish SF. Intracranial MR-guided laser-induced thermal therapy: single-center experience with the Visualase thermal therapy system. J Neurosurg. January 2016:1-8.	2016	Glioblastoma, recurrent, radiation necrosis, metastatic, other	doi: 10.3171/2015.7.JNS15244
Pruitt R, Gamble A, Black K, et al. Complication avoidance in laser interstitial thermal therapy: lessons learned. J Neurosurg. June 2016:1-8.	2016	Epilepsy, glioblastoma, metastatic, radiation necrosis	doi: 10.3171/2016.3.JNS152147
Sharma M, Balasubramanian S, Silva D, et al. Laser interstitial thermal therapy in the management of brain metastasis and radiation necrosis after radiosurgery: an overview. Expert Rev Neurother. 2016;16(2):223-232.	2016	Metastatic, radiation necrosis	doi: 10.1586/14737175.2016.1135736

BRAIN TUMOR & ONCOLOGY ARTICLES

Article Citation	Year	Disease State	Link to Article
Sharma M, Habboub G, Behbahani M, et al.. Thermal injury to corticospinal tracts and postoperative motor deficits after laser interstitial thermal therapy. Neurosurg Focus. 2016;41(4):E6.	2016	Glioblastoma, radiation necrosis, other	doi: 10.3171/2016.7.FOCUS16216
Sharma M, Silva D, Balasubramanian S, et al. Laser ablation in neuro-oncology. In: Agrawal A, ed. neurooncology - newer developments. InTech; 2016.	2016	Glioblastoma, metastatic, radiation necrosis	doi: 10.5772/62771
Voigt JD, Barnett G. The value of using a brain Laser Interstitial Thermal Therapy (LITT) system in patients presenting with high grade gliomas where maximal safe resection may not be feasible. Cost Eff Resour Alloc CE. 2016;14:6.	2016	Unspecified primary tumor	doi: 10.1186/s12962-016-0055-2
Missios S, Bekelis K, Barnett GH. Renaissance of laser interstitial thermal ablation. Neurosurg Focus. 2015;38(3):E13.	2015	Epilepsy, glioblastoma, metastatic, recurrent, radiation necrosis	doi: 10.3171/2014.12.FOCUS14762
Mohammadi AM, Hawasli AH, Rodriguez A, et al. The role of laser interstitial thermal therapy in enhancing progression-free survival of difficult-to-access high-grade gliomas: a multicenter study. Cancer Med. 2014;3(4):971-979.	2014	Glioblastoma, recurrent	doi: 10.1002/cam4.266
Sloan AE, Ahluwalia MS, Valerio-Pascua J, et al. Results of the NeuroBlate System first-in-humans phase I clinical trial for recurrent glioblastoma: clinical article. J Neurosurg. 2013;118(6):1202-1219.	2013	Glioblastoma, recurrent	doi: 10.3171/2013.1.JNS1291

EPILEPSY ARTICLES

Article Citation	Year	Disease State	Link to Article
Youngerman BE, Banu MA, Khan F, McKhann GM, Schevon CA, Jagid JR, Cajigas I, Theodotou CB, Ko A, Buckley R, Ojemann JG, Miller JW, Laxton AW, Couture DE, Popli GS, Buch VP, Halpern CH, Le S, Sharan AD, Sperling MR, Mehta AD, Englot DJ, Neimat JS, Konrad PE, Sheth SA, Neal EG, Vale FL, Holloway KL, Air EL, Schwalb JM, D'Haese PF, Wu C. Long-term outcomes of mesial temporal laser interstitial thermal therapy for drug-resistant epilepsy and subsequent surgery for seizure recurrence: a multi-centre cohort study. J Neurol Neurosurg Psychiatry. 2023 Jun 19:jnnp-2022-330979.	2023	Mesial temporal lobe epilepsy	doi: 10.1136/jnnp-2022-330979
Mendoza-Elias N, Satzer D, Henry J, Nordli DR Jr, Warnke PC. Tailored Hemispherotomy Using Tractography-Guided Laser Interstitial Thermal Therapy. Oper Neurosurg (Hagerstown). 2023 Jun 1;24(6):e407-e413.	2023	Pediatric epilepsy	doi: 10.1227/ons.0000000000000650
Aum DJ, Reynolds RA, McEvoy S, Tomko S, Zempel J, Roland JL, Smyth MD. Surgical outcomes of open and laser interstitial thermal therapy approaches for corpus callosotomy in pediatric epilepsy. Epilepsia. 2023 Jun 11.	2023	Pediatric epilepsy	doi: 10.1111/epi.17679
Arocho-Quinones EV, Lew SM, Handler MH, et al. Magnetic resonance imaging–guided stereotactic laser ablation therapy for the treatment of pediatric epilepsy: a retrospective multiinstitutional study. J Neurosurg Pediatr. Published online March 1, 2023:1-14.	2023	Pediatric epilepsy	doi:10.3171/2022.12.PEDS22282
De Witt E, Almaguer-Ascencio M, Petropoulou K, et al. The use of stereotactic MRI-guided laser interstitial thermal therapy for the treatment of pediatric cavernous malformations: the SUNY Upstate Golisano Children's Hospital experience. Child's nervous system : ChNS : official journal of the International Society for Pediatric Neurosurgery, 10.1007/s00381-022-05701-6. 22 Nov. 2022	2022	Cavernous malformation	doi:10.1007/s00 381-022-05701-6
Park C, Sinha S, Southwell D. Laser ablative treatment of musicogenic epilepsy arising from dominant mesial temporal lobe: illustrative case. Journal of neurosurgery. Case lessons vol. 3,23 CASE2295. 6 Jun. 2022	2022	Temporal lobe epilepsy	doi:10.3171/CASE2295
Barkley A, Sullivan L, Gibson A. Acute Postoperative Seizures and Engel Class Outcome at 1 Year Postselective Laser Amygdalohippocampal Ablation for Mesial Temporal Lobe Epilepsy. Neurosurgery vol. 91,2 (2022): 347-354.	2022	Mesial temporal lobe epilepsy	doi:10.1227/neu.0000000000002023
Kanner A, Irving, L, Cajigas I, et al. Long-term seizure and psychiatric outcomes following laser ablation of mesial temporal structures. Epilepsia vol. 63,4 (2022): 812-823.	2022	Mesial temporal lobe epilepsy	doi:10.1111/epi.17183
Hect JL, Alattar AA, Harford EE, et al. Stereotactic laser interstitial thermal therapy for the treatment of pediatric drug-resistant epilepsy: indications, techniques, and safety. Childs Nerv Syst. Published online March 11, 2022.	2022	Pediatrics	doi: 10.1007/s00381-022-05491-x
Sinha SR, Yang JC, Wallace MJ, Grover K, Johnson FR, Reed SD. Patient preferences pertaining to treatment options for drug-resistant focal epilepsy. Epilepsy & Behavior. 2022;127:108529.	2022	Patient preference research	doi: 10.1016/j.yebeh.2021.108529
Drane DL, Willie JT, Pedersen NP, Qiu D, Voets NL, Millis SR, Soares BP, Saindane AM, Hu R, Kim MS, Hewitt KC, Hakimian S, Grabowski T, Ojemann JG, Loring DW, Meador KJ, Faught E Jr, Miller JW, Gross RE. Superior Verbal Memory Outcome After Stereotactic Laser Amygdalohippocampotomy. Front Neurol. 2021 Dec 9;12:779495. PMID: 34956059; PMCID: PMC8695842.	2021	Mesial temporal lobe epilepsy	doi: 10.3389/fneur.2021.779495

EPILEPSY ARTICLES

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Gireesh ED, Lee K, Skinner H, Seo J, Chen PC, Westerveld M, Beegle RD, Castillo E, Baumgartner J. Intracranial EEG and laser interstitial thermal therapy in MRI-negative insular and/or cingulate epilepsy: case series. J Neurosurg. 2020 Dec 11:1-9. Epub ahead of print.	2021	Extratemporal lobe epilepsy	doi: 10.3171/2020.7.JNS201912
Hoppe C, Helmstaedter C. Laser interstitial thermotherapy (LiTT) in pediatric epilepsy surgery. Seizure. 2020;77:69-75.	2021	Pediatrics	doi: 10.1016/j.seizure.2018.12.010
Kang JY, Pickard AA, Bronder J, Yenokyan G, Chen M, Anderson WS, Sperling MR, Nei M. Magnetic resonance-guided laser interstitial thermal therapy: Correlations with seizure outcome. Epilepsia. 2021 May;62(5):1085-1091. Epub 2021 Mar 13.	2021	Mesial temporal lobe epilepsy	doi: 10.1111/epi.16872
Mallela AN, Hect JL, Abou-Al-Shaar H, Akwayena E, Abel TJ. Stereotactic laser interstitial thermal therapy corpus callosotomy for the treatment of pediatric drug-resistant epilepsy. Epilepsia Open. 2021 Nov 10. Epub ahead of print.	2021	Corpus Callosotomy	doi: 10.1002/epi4.12559
Satzer D, Tao JX, Warnke PC. Extent of parahippocampal ablation is associated with seizure freedom after laser amygdalohippocampotomy. J Neurosurg. 2021 Jun 4:1-10. Epub ahead of print.	2021	Mesial temporal lobe epilepsy	doi: 10.3171/2020.11.JNS203261
Zeller S, Kaye J, Jumah F, et al. Current applications and safety profile of laser interstitial thermal therapy in the pediatric population: a systematic review of the literature. Journal of Neurosurgery: Pediatrics. Published online July 2021:1-8.	2021	Pediatrics	doi: 10.3171/2021.2.PEDS20721
Donos C, Rollo P, Tombridge K, et al. Visual field deficits following laser ablation of the hippocampus. Neurology. 2020 Mar;94 (12):E1303-E1313.	2020	Mesial temporal lobe epilepsy	doi: 10.1212/WNL.0000000000008940
Gadgil N, Lam S, Pan IW, et al. Staged Magnetic Resonance-Guided Laser Interstitial Thermal Therapy for Hypothalamic Hamartoma: Analysis of Ablation Volumes and Morphological Considerations. Neurosurgery. 2020;86(6):808-816.	2020	Pediatrics	doi: 10.1093/neuros/nyz378
Gupta K, Cabaniss B, Kheder A, et al. Stereotactic MRI-guided laser interstitial thermal therapy for extratemporal lobe epilepsy. Epilepsia. 2020 Aug 10:	2020	Extratemporal lobe epilepsy	doi: 10.1111/epi.16614
Kerezoudis P, Parisi V, Marsh W.R, et al. Surgical outcomes of laser interstitial thermal therapy for temporal lobe epilepsy: systematic review and meta-analysis, World Neurosurgery. 2020 Volume 143, 2020, Pages 527-536.e3, ISSN 1878-8750.	2020	Epilepsy	doi: 10.1016/j.wneu.2020.07.194
Landazuri P, Shih J, Leuthardt E, et al. A prospective multicenter study of laser ablation for drug resistant epilepsy – One year outcomes, Epilepsy Research. 2020;167.	2020	Epilepsy	doi: 10.1016/j.eplepsyres.2020.106473
Sharma M, Ball T, Alhourani A, et al. Inverse national trends of laser interstitial thermal therapy and open surgical procedures for refractory epilepsy: A nationwide inpatient sample-based propensity score matching analysis. Neurosurg Focus. 2020 Apr;48(4):E11.	2020	Epilepsy	doi: 10.3171/2020.1.FOCUS19935

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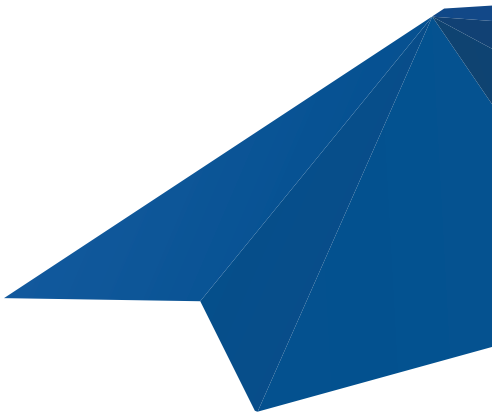
Article Citation	Year	Disease State	Link to Article
Sheikh S, Kattan M, Steinmetz F, et al. Cost-effectiveness of surgery for drug-resistant temporal lobe epilepsy in the US. Neurology Sep 2020, 95 (10) e1404-e1416;	2020	Temporal lobe epilepsy	doi: 10.1212/WNL.0000000000010185
Treiber JM, CurryDJ, Weiner HL et al. Epilepsy surgery in tuberous sclerosis complex (TSC): emerging techniques and redefinition of treatment goals. Childs Nerv Syst 36, 2519–2525 (2020).	2020	Epilepsy, pediatrics, tuberous sclerosis	doi: 10.1007/s00381-020-04715-2
Youngerman B, Save S, McKhann G. Magnetic resonance imaging-guided laser interstitial thermal therapy for epilepsy: Systematic Review of Technique, Indications, and Outcomes. Neurosurgery. 2020 Apr; 86 (4):E366-E382.	2020	Epilepsy	doi: 10.1093/neuros/nyz556
Grewal SS, Alvi MA, Lu VM, et al. Magnetic resonance–guided laser interstitial thermal therapy versus stereotactic radiosurgery for medically intractable temporal lobe epilepsy: a systematic review and meta-analysis of seizure outcomes and complications. World Neurosurgery. 2019;122:e32-e47.	2019	Epilepsy	doi: 10.1016/j.wneu.2018.08.227
Hale AT, Sen S, Haider AS, et al. Open resection vs laser interstitial thermal therapy for the treatment of pediatric insular epilepsy. Neurosurgery. March 2019.	2019	Epilepsy, pediatrics	doi: 10.1093/neuros/nyz094
Roland JL, Smyth MD. Recent advances in the neurosurgical treatment of pediatric epilepsy. Journal of Neurosurgery: Pediatrics. 2019;23(4):411-421.	2019	Epilepsy, pediatrics	doi: 10.3171/2018.12.PEDS18350
Shimamoto S, Wu C, Sperling MR. Laser interstitial thermal therapy in drug-resistant epilepsy: Current Opinion in Neurology. 2019;32(2):237-245.	2019	Epilepsy	doi: 10.1097/WCO.0000000000000662
Tatum WO, Thottempudi N, Gupta V, et al. De novo temporal intermittent rhythmic delta activity after laser interstitial thermal therapy for mesial temporal lobe epilepsy predicts poor seizure outcome. Clin Neurophysiol. 2019 Jan;130(1): 122-127.	2019	Mesial temporal lobe epilepsy	doi: 10.1016/j.clinph.2018.11.012
Wu C, Jermakowicz WJ, Chakravorti S, et al. Effects of surgical targeting in laser interstitial thermal therapy for mesial temporal lobe epilepsy: a multicenter study of 234 patients. Epilepsia. May 2019.	2019	Epilepsy	doi: 10.1111/epi.15565
Grewal SS, Zimmerman RS, Worrell G, et al. Laser ablation for mesial temporal epilepsy: a multi-site, single institutional series. Journal of Neurosurgery. July 2018:1-8.	2018	Epilepsy	doi: 10.3171/2018.2.JNS171873
Gross RE, Stern MA, Willie JT, et al. Stereotactic laser amygdalohippocampotomy for mesial temporal lobe epilepsy: SLAH outcomes for MTLE. Ann Neurol. 2018;83(3):575-587.	2018	Epilepsy	doi: 10.1002/ana.25180
Petito GT, Wharen RE, Feyissa AM, Grewal SS, Lucas JA, Tatum WO. The impact of stereotactic laser ablation at a typical epilepsy center. Epilepsy & Behavior. 2018;78:37-44.	2018	Epilepsy	doi: 10.1016/j.yebeh.2017.10.041

EPILEPSY ARTICLES

Article Citation	Year	Disease State	Link to Article
Tovar-Spinoza Z, Ziechmann R, Zyck S. Single and staged laser interstitial thermal therapy ablation for cortical tubers causing refractory epilepsy in pediatric patients. Neurosurgical Focus. 2018;45(3):E9.	2018	Epilepsy, pediatrics	doi: 10.3171/2018.6.FOCUS18228
Youngerman BE, Oh JY, Anbarasan D, et al. Laser ablation is effective for temporal lobe epilepsy with and without mesial temporal sclerosis if hippocampal seizure onsets are localized by stereoelectroencephalography. Epilepsia. 2018;59(3): 595-606.	2018	Epilepsy	doi: 10.1111/epi.14004
Jermakowicz WJ, Kanner AM, Sur S, et al. Laser thermal ablation for mesiotemporal epilepsy: analysis of ablation volumes and trajectories. Epilepsia. 2017;58(5):801-810.	2017	Epilepsy	doi: 10.1111/epi.13715
Lagman C, Chung LK, Pelargos PE, et al. Laser neurosurgery: a systematic analysis of magnetic resonance-guided laser interstitial thermal therapies. J Clin Neurosci. 2017;36:20-26.	2017	Epilepsy, unspecified tumor	doi: 10.1016/j.jocn.2016.10.019
Perry MS, Donahue DJ, Malik SI, et al. Magnetic resonance imaging–guided laser interstitial thermal therapy as treatment for intractable insular epilepsy in children. J Neurosurg Pediatr. 2017;20(6):575-582.	2017	Epilepsy, pediatrics	doi: 10.3171/2017.6.PEDS17158
Tao JX, Wu S, Lacy M, et al. Stereotactic EEG-guided laser interstitial thermal therapy for mesial temporal lobe epilepsy. J Neurol Neurosurg Psychiatry. November 2017:jnnp-2017-316833.	2017	Epilepsy	doi: 10.1136/jnnp-2017-316833
Karsy M, Guan J, Ducis K, et al. Emerging surgical therapies in the treatment of pediatric epilepsy. Transl Pediatr. 2016;5(2):67-78.	2016	Epilepsy, pediatrics	doi: 10.21037/tp.2016.04.01
LaRiviere MJ, Gross RE. Stereotactic laser ablation for medically intractable epilepsy: the next generation of minimally invasive epilepsy surgery. Front Surg. 2016;3:64.	2016	Epilepsy	doi: 10.3389/fsurg.2016.00064
Pruitt R, Gamble A, Black K et al.. Complication avoidance in laser interstitial thermal therapy: lessons learned. J Neurosurg. June 2016:1-8.	2016	Epilepsy, glioblastoma, metastatic, radiation necrosis	doi: 10.3171/2016.3.JNS152147
Drane DL, Loring DW, Voets NL, et al. Better object recognition and naming outcome with MRI-guided stereotactic laser amygdalohippocampotomy for temporal lobe epilepsy. Epilepsia. 2015;56(1):101-113.	2015	Epilepsy	doi: 10.1111/epi.12860



Disclosures

Monteris provides technology for neurosurgeons, which allows them to ablate (destroy with heat), brain structures such as brain tumors, radiation necrosis, and epileptic foci. Monteris technology includes the NeuroBlate System, AtamA, and MiniBolt devices, which may be used together to apply the focused laser energy with little or no effect on surrounding healthy tissue. The NeuroBlate System provides clinicians a tool that offers near real-time control and MRI visualization of the therapy during laser ablation treatment.

All brain surgeries carry risk. Possible adverse events include, but are not limited to, hematoma, embolic events, edema, bleeding, cerebral spinal fluid (CSF) leakage, infection, unintended major tissue damage and permanent neurological deficits. Prior to using these devices, please review the Instructions for Use for a complete listing of indications, contraindications, warnings, precautions and potential adverse events. For full prescribing information, please visit **monteris.com**

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