

Convexity arachnoid cyst

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Case reports

An 11-year-old girl was brought to the emergency department with a complaint of a progressive [headache](#) that was associated with vomiting. On examination, she was found to have [papilledema](#). Subsequently, [magnetic resonance imaging](#) of the brain was performed to exclude any space-occupying lesion. The scan demonstrated a right extra-axial [temporal lesion](#), measuring 7.8 x 5.4 x 4.9 cm on maximum dimensions, along with an extension to the right cerebral convexity in a crescentic shape. The lesion follows the signal intensity of [cerebrospinal fluid](#) on all sequences and exhibited no post-contrast enhancement or restricted diffusion. The lesion exerted a [mass effect](#) in the form of compression of the right temporal lobe. These findings were consistent with an [arachnoid cyst](#) with [subdural hygroma](#). The patient was referred to the neurosurgery team. Then, the right temporal arachnoid cyst was drained through the right temporal craniotomy and the subdural hygroma was drained through a frontal Burr hole. The patient was seen after one month in the pediatrics clinic and was completely asymptomatic ¹⁾

Pending classification

1: Mao X, Xu L, Liu W, Hao S, Liu B. Local Skull Thinning is One of Risks for the Ruptured Arachnoid Cysts With Chronic Subdural Hematoma in Adults: Thirty- two Clinical Reports. J Craniofac Surg. 2022 Mar-Apr 01;33(2):e102-e105. doi: 10.1097/SCS.00000000000007957. PMID: 34260457.

2: Szczygielski J, München D, Ketter R, Ràkász L, Schulz-Schaeffer W, Oertel J. Head Injury without Head Blow? A Rare Case of Subdural Hematoma Associated with Minute Arachnoid Cyst in a Teenage Skater. J Neurol Surg A Cent Eur Neurosurg. 2021 Nov;82(6):604-610. doi: 10.1055/s-0040-1721021. Epub 2021 Feb 4. PMID: 33540449.

- 3: Bryden A, Majors N, Puri V, Moriarty T. A Rare Case of Spontaneous Arachnoid Cyst Rupture Presenting as Right Hemiplegia and Expressive Aphasia in a Pediatric Patient. *Children (Basel)*. 2021 Jan 24;8(2):78. doi: 10.3390/children8020078. PMID: 33498812; PMCID: PMC7911169.
- 4: García-Pérez D, Panero I, Paredes I. Positive outcome after endoscopic treatment of a symptomatic convexity arachnoid cyst in an elderly. *Br J Neurosurg*. 2021 Jan 19:1-2. doi: 10.1080/02688697.2021.1872774. Epub ahead of print. PMID: 33464128.
- 5: Watanabe T, Sugawara T, Inaji M, Tanaka Y, Nariai T, Tazawa T, Maehara T. [Remarkable Recovery of Chronic Symptoms in an Adult with Middle Fossa Convexity Arachnoid Cyst after Cystoventriculostomy: A Case Report]. *No Shinkei Geka*. 2020 Nov;48(11):1059-1065. Japanese. doi: 10.11477/mf.1436204320. PMID: 33199664.
- 6: Kimura R, Hayashi Y, Sasagawa Y, Kobayashi M, Oishi M, Kinoshita M, Nakada M. Progressively Enlarged Convexity Arachnoid Cysts in Elderly Patients: A Report of 2 Cases. *World Neurosurg*. 2020 Mar;135:253-258. doi: 10.1016/j.wneu.2019.12.112. Epub 2019 Dec 27. PMID: 31887463.
- 7: Kim DU, Park HR, Chang JC, Park SQ, Cho SJ, Park HK. Disappearance of Arachnoid Cyst after Burrhole Trephination: Case Series. *Korean J Neurotrauma*. 2019 Aug 28;15(2):170-175. doi: 10.13004/kjnt.2019.15.e18. PMID: 31720272; PMCID: PMC6826094.
- 8: Nagata K, Kiyofuji S, Yokoyama M, Sora S. Resection of a lateral supratentorial endodermal cyst complicated by postoperative seizures: A case report. *Surg Neurol Int*. 2019 Jul 19;10:141. doi: 10.25259/SNI_259_2019. PMID: 31528476; PMCID: PMC6744738.
- 9: Diaz-Romero Paz R, Avendaño Altimira P, Coloma Valverde G, Balhen Martin C. A Rare Case of Negative-Pressure Hydrocephalus: A Plausible Explanation and the Role of Transmantle Theory. *World Neurosurg*. 2019 May;125:6-9. doi: 10.1016/j.wneu.2019.01.117. Epub 2019 Jan 31. PMID: 30710718.
- 10: Schul DB, Meier MP, Földvari Z, Krammer MJ, Lumenta CB. Rare Case of Convexity Meningioma Growing into Arachnoid Cyst. *World Neurosurg*. 2018 Sep;117:199-202. doi: 10.1016/j.wneu.2018.06.040. Epub 2018 Jun 15. PMID: 29913293.
- 11: Wu X, Li G, Zhao J, Zhu X, Zhang Y, Hou K. Arachnoid Cyst-Associated Chronic Subdural Hematoma: Report of 14 Cases and a Systematic Literature Review. *World Neurosurg*. 2018 Jan;109:e118-e130. doi: 10.1016/j.wneu.2017.09.115. Epub 2017 Sep 28. PMID: 28962953.
- 12: Wang C, Han G, You C, Liu C, Wang J, Xiong Y. Individual surgical treatment of intracranial arachnoid cyst in pediatric patients. *Neurol India*. 2013 Jul- Aug;61(4):400-5. doi: 10.4103/0028-3886.117618. PMID: 24005732.
- 13: Gui S, Zong X, Li C, Zhang Y. Endoscopic treatment of convexity arachnoid cysts. *Childs Nerv Syst*. 2013 Mar;29(3):505-8. doi: 10.1007/s00381-012-1957-8. Epub 2012 Nov 14. PMID: 23149590.
- 14: Al-Holou WN, Terman S, Kilburg C, Garton HJ, Muraszko KM, Maher CO. Prevalence and natural history of arachnoid cysts in adults. *J Neurosurg*. 2013 Feb;118(2):222-31. doi: 10.3171/2012.10.JNS12548. Epub 2012 Nov 9. PMID: 23140149.
- 15: Zhang B, Zhang Y, Ma Z. Long-term results of cystoperitoneal shunt placement for the treatment of arachnoid cysts in children. *J Neurosurg Pediatr*. 2012 Oct;10(4):302-5. doi: 10.3171/2012.7.PEDS11540. Epub 2012 Aug 17. PMID: 22900484.
- 16: Seddighi A, Seddighi AS, Zali AR, Baqdashti HR. Presentation of a minimally symptomatic large

extradural hematoma in a patient with an arachnoid cyst: a case report and review of the literature. *J Med Case Rep.* 2011 Dec 19;5:581. doi: 10.1186/1752-1947-5-581. PMID: 22182235; PMCID: PMC3339374.

17: Alexiou GA, Varela M, Sfakianos G, Prodromou N. Shunting for the treatment of arachnoid cysts in children. *Neurosurgery.* 2010 Dec;67(6):1632-6; discussion 1636. doi: 10.1227/NEU.0b013e3181f94476. PMID: 21107193.

18: Helland CA, Lund-Johansen M, Wester K. Location, sidedness, and sex distribution of intracranial arachnoid cysts in a population-based sample. *J Neurosurg.* 2010 Nov;113(5):934-9. doi: 10.3171/2009.11.JNS081663. Epub 2010 Jan 22. PMID: 20095787.

19: Suzuki M, Tamaki T, Toda S, Tsuchiya M, Kogure K, Hosone M, Node Y, Teramoto A. Delayed recurrent arachnoid cyst of the occipital convexity in an elderly woman. *Neurol Med Chir (Tokyo).* 2009 Mar;49(3):134-7. doi: 10.2176/nmc.49.134. PMID: 19318741.

20: Marshman LA, David KM, King A, Chawda SJ. Delayed fibrotic obliteration of the spinal subarachnoid space after cerebral aneurysmal subarachnoid hemorrhage: case report. *Neurosurgery.* 2007 Sep;61(3):E659-60; discussion E660. doi: 10.1227/01.NEU.0000290920.55470.EC. PMID: 17881943.

21: Kushen MC, Frim D. Placement of subdural electrode grids for seizure focus localization in patients with a large arachnoid cyst. Technical note. *Neurosurg Focus.* 2007 Feb 15;22(2):E5. doi: 10.3171/foc.2007.22.2.5. PMID: 17608348.

22: Yagi T, Ohashi Y, Nakano S, Ogawa M, Fukamachi A. [A case of symptomatic arachnoid cyst of the occipital convexity in an adult]. *No Shinkei Geka.* 2006 Nov;34(11):1125-9. Japanese. PMID: 17087267.

23: Tucker A, Miyake H, Omura T, Tsuji M, Ukita T, Nishihara K, Oi S. Huge arachnoid cyst of the occipital cerebral convexity. *Neurol Med Chir (Tokyo).* 2006 Jul;46(7):361-5. doi: 10.2176/nmc.46.361. PMID: 16861832.

24: Helland CA, Wester K. Arachnoid cysts in adults: long-term follow-up of patients treated with internal shunts to the subdural compartment. *Surg Neurol.* 2006 Jul;66(1):56-61; discussion 61. doi: 10.1016/j.surneu.2005.12.032. PMID: 16793443.

25: Chernov MF, Kamikawa S, Yamane F, Hori T. Double-endoscopic approach for management of convexity arachnoid cyst: case report. *Surg Neurol.* 2004 May;61(5):483-6; discussion 486-7. doi: 10.1016/S0090-3019(03)00574-3. PMID: 15120233.

26: Cokluk C, Senel A, Celik F, Ergür H. Spontaneous disappearance of two asymptomatic arachnoid cysts in two different locations. *Minim Invasive Neurosurg.* 2003 Apr;46(2):110-2. doi: 10.1055/s-2003-39337. PMID: 12761683.

27: Weber J, Gassel AM, Hoch A, Kilisek L, Spring A. Intraoperative management of cystic meningiomas. *Neurosurg Rev.* 2003 Jan;26(1):62-6. doi: 10.1007/s10143-002-0228-7. Epub 2002 Jun 11. PMID: 12520319.

28: Mori K, Yamamoto T, Horinaka N, Maeda M. Arachnoid cyst is a risk factor for chronic subdural hematoma in juveniles: twelve cases of chronic subdural hematoma associated with arachnoid cyst. *J Neurotrauma.* 2002 Sep;19(9):1017-27. doi: 10.1089/089771502760341938. PMID: 12482115.

- 29: Galarza M, Pomata HB, Pueyrredón F, Bartuluchi M, Zuccaro GN, Monges JA. Symptomatic supratentorial arachnoid cysts in children. *Pediatr Neurol*. 2002 Sep;27(3):180-5. doi: 10.1016/s0887-8994(02)00414-9. PMID: 12393127.
- 30: Ulmer S, Engellandt K, Stiller U, Nabavi A, Jansen O, Mehdorn MH. Chronic subdural hemorrhage into a giant arachnoidal cyst (Galassi classification type III). *J Comput Assist Tomogr*. 2002 Jul-Aug;26(4):647-53. doi: 10.1097/00004728-200207000-00031. PMID: 12218836.
- 31: Hayashi Y, Futami K, Munemoto S, Hamada Y, Soma M, Yamashita J, Hasegawa M. Congenital arachnoid cyst mimicking meningocele. *Pediatr Neurosurg*. 2002 Jun;36(6):324-8. doi: 10.1159/000063537. PMID: 12077478.
- 32: Tamiya T, Ono Y, Matsumoto K, Ohmoto T. Peritumoral brain edema in intracranial meningiomas: effects of radiological and histological factors. *Neurosurgery*. 2001 Nov;49(5):1046-51; discussion 1051-2. doi: 10.1097/00006123-200111000-00003. PMID: 11846896.
- 33: Utsunomiya A, Narita N, Jokura H. [Treatment of symptomatic convexity arachnoid cyst in the elderly by neuroendoscope assisted-stereotactic surgery: a case report]. *No To Shinkei*. 2001 Nov;53(11):1039-42. Japanese. PMID: 11761913.
- 34: Motohashi O, Kameyama M, Imaizumi S, Mino M, Naganuma H, Onuma T. [An epithelial cyst at the frontal convexity]. *No Shinkei Geka*. 2001 Sep;29(9):857-62. Japanese. PMID: 11596470.
- 35: Thompson TP, Levy EI, Jho HD, Lunsford LD. Primum non nocere: Multimodality management strategies when multiple mass lesions strike a single patient. *Surg Neurol*. 2001 Jun;55(6):332-9. doi: 10.1016/s0090-3019(01)00458-x. PMID: 11483187.
- 36: Tsurushima H, Harakuni T, Saito A, Tominaga D, Hyodo A, Yoshii Y. Symptomatic arachnoid cyst of the left frontal convexity presenting with memory disturbance—case report. *Neurol Med Chir (Tokyo)*. 2000 Jun;40(6):339-41. doi: 10.2176/nmc.40.339. PMID: 10892273.
- 37: Rizk T, Samaha E, Nohra G, Maarrawi J, Okais N. Fracture évolutive du toit de l'orbite [Growing fracture of the orbital roof. A case report]. *Neurochirurgie*. 1999 Dec;45(5):422-5. French. PMID: 10717595.
- 38: Kim MH. The role of endoscopic fenestration procedures for cerebral arachnoid cysts. *J Korean Med Sci*. 1999 Aug;14(4):443-7. doi: 10.3346/jkms.1999.14.4.443. PMID: 10485626; PMCID: PMC3054399.
- 39: Yan HJ, Lin KE, Lee ST, Tzaan WC. Calcified chronic subdural hematoma: case report. *Changgeng Yi Xue Za Zhi*. 1998 Dec;21(4):521-5. PMID: 10074745.
- 40: Asahi T, Endo S, Akai T, Takaba M, Takaku A. Nontraumatic convexity intradiploic arachnoid cyst. *Neurol Med Chir (Tokyo)*. 1998 Jun;38(6):374-6. doi: 10.2176/nmc.38.374. PMID: 9689824.
- 41: Vassilyadi M, Farmer JP, Montes JL. Negative-pressure hydrocephalus. *J Neurosurg*. 1995 Sep;83(3):486-90. doi: 10.3171/jns.1995.83.3.0486. PMID: 7666227.
- 42: Okura A, Noguchi S, Yuge T, Maruiwa H, Matsunaga M, Shigemori M. [A case of convexity arachnoid cyst associated with chronic subdural hematoma and intracystic hemorrhage]. *No Shinkei Geka*. 1994 Mar;22(3):273-7. Japanese. PMID: 8133971.
- 43: Behrens P, Ostertag CB. Zystische Fehlbildungen des Gehirns: Stereotaktische Diagnostik und

Therapie [Cystic abnormalities of the brain: stereotaxic diagnosis and therapy]. Nervenarzt. 1992 Dec;63(12):725-30. German. PMID: 1494386.

44: Pomeranz S, Constantini S, Lubetzki-Korn I, Amir N. Familial intracranial arachnoid cysts. Childs Nerv Syst. 1991 Apr;7(2):100-2. doi: 10.1007/BF00247865. PMID: 1863926.

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Almousa AS, Alotaibi SN, Al Wadany MM, Al Wadany FM, Alharbi AS. Spontaneous Rupture of Arachnoid Cyst in a Child: A Rare Case Report. Cureus. 2023 Jan 11;15(1):e33652. doi: 10.7759/cureus.33652. PMID: 36788862; PMCID: PMC9912991.

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