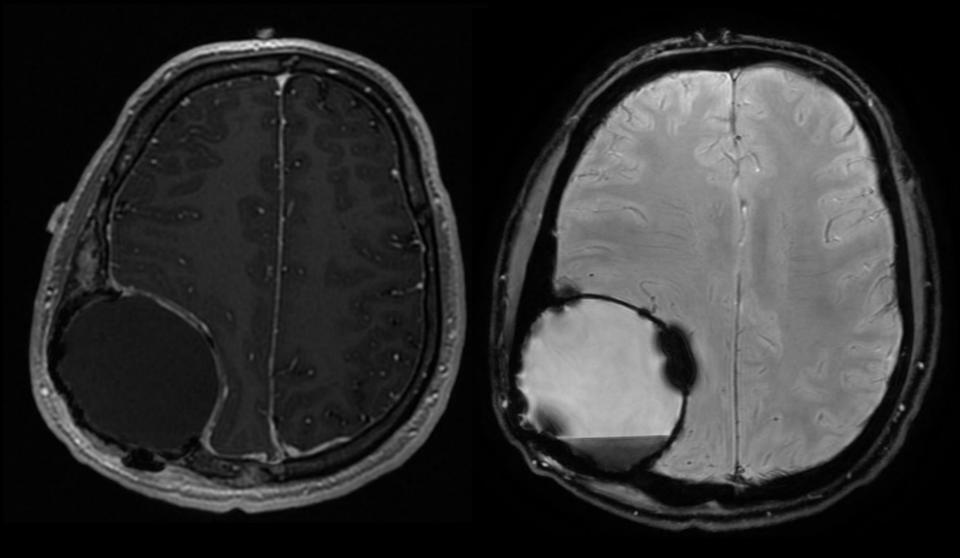
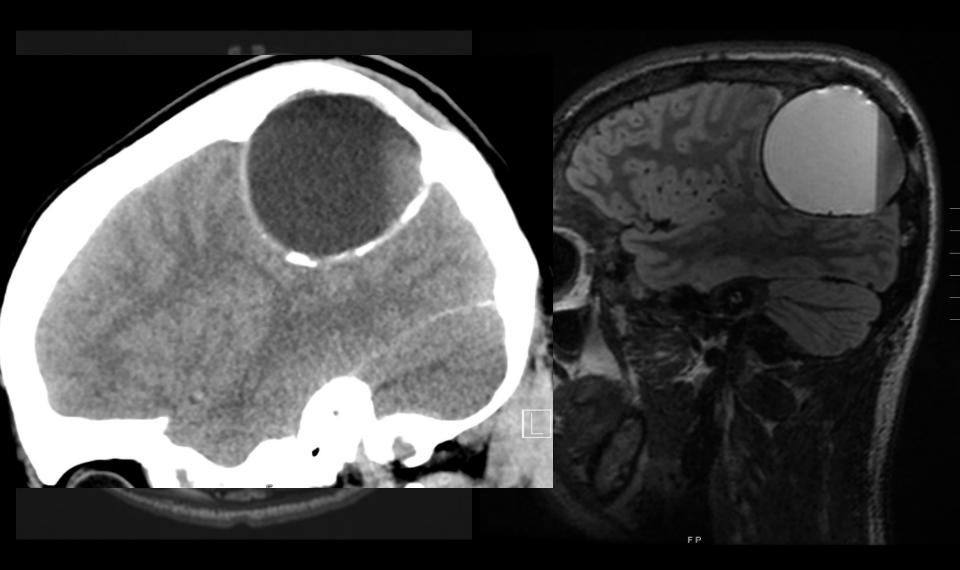


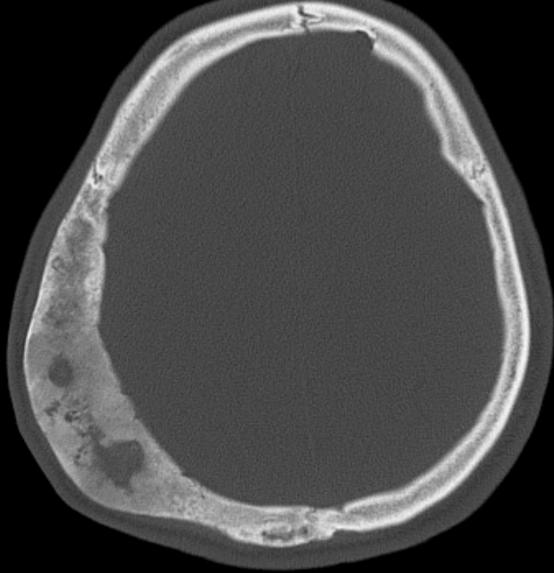
21 yr old man with decreased concentration and math skills

Valentin Lance 3/18/16









Fibrous Dysplasia with Secondary Aneurysmal Bone Cyst

- Extremely rare to have both lesions present as a solitary calvarial lesion
- 9 case reports in the literature

Lee JW et al. J Korean Neurosurg Soc. 2010;48:551-554

Author/Year	Sex/age	Symptom	Duration of	Location	CT findings
			symptom		
Branch CL, 1986	F/9	Expanding painful mass /	1 month /	Parietal /	Large area of bone lysis with erosion of the inner and
		Painless mass	2 years	Frontotemporal	outer tables and expansion of the diploic space
Branch CL, 1986	M/19	Painless mass	4 weeks	Parietal	Cystic expansion of the skull and soft tissue mass
					with an abnormal rim of contrast enhancement
Rappaport ZH, 1989	M/25	Painless mass	Unknown	Occipital	Intradiploic hypodense lesion
Wojno KJ, 1994	F/14	Painless mass	Unknown	Temporal	heterogeneous cystic lesion
Wojno KJ, 1994	M/40	Expanding mass	Unknown	Frontal	Diffuse thickening of the calvarium and cystic lesion
					with septation
Itshayek E, 2002	M/19	Expanding painless mass	Unknown	Occipital	Expanded diploic space with ground glass appearance
Lin WC, 2004	M/18	Expanding painful mass	2 weeks	Frontal	Cystic degeneration and multiple cavities with
					internal fluid-fluid level
Mattei TA, 2005	F/19	Headache, nuchal rigidity,	Unknown	Occipital	Subarachnoid hemorrhage and diploic cyst with
		Painless mass		-	fluid-fluid level
Lee JW, 2010	F/18	Expanding painful mass	10 days	Frontoparietal	Osteolytic lesion and expansion of the diploic space

Table 1. Summary of published cases of fibrous dysplasia in combination with aneurysmal bone cyst presenting with solitary lesion of calvarium

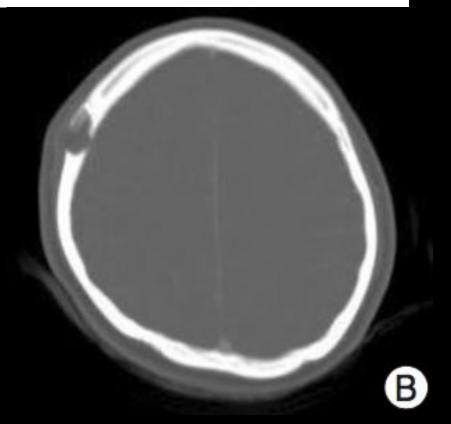
Lee JW et al. J Korean Neurosurg Soc. 2010;48:551-554

Case Report

Fibrous Dysplasia with Aneurysmal Bone Cyst Presenting as Painful Solitary Skull lesion

Jung Won Lee, M.D.,¹ Jae Hoon Kim, M.D.,¹ Seung Hoon Han, M.D.,² Hee In Kang, M.D.¹ Department of Neurosurgery,¹ Eulji University Eulji Hospital, Seoul, Korea Department of Rehabilitation,² Hanyang University Guri Hospital, Guri, Korea

 18 year old F presented with painful scalp mass



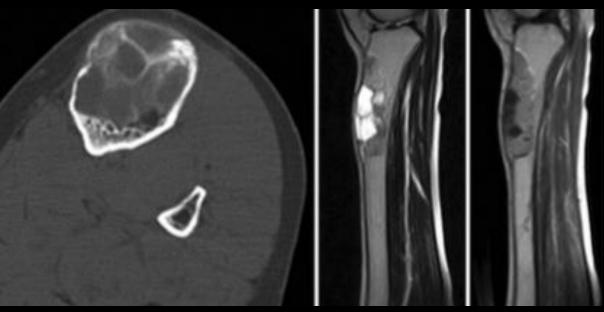
Lee JW et al. J Korean Neurosurg Soc. 2010;48:551-554

Polyostotic fibrous dysplasia with secondary aneurysmal bone cyst in tibia

Vandana L. Gaopande, Maithili M. Kulkarni, Deshmukh S. D, Varsha P. Rangankar

Departments of Pathology, and 'Radiology, Smt. Kashibai Navale Medical College, Pune, Maharashtra, India

- Also rare in the extremities
- Less common in association with polyostotic FD than monostotic FD



Gaopande VL et al. J Orthop Allied Sci. 2015;3:19-21

Pathophysiology

- Unknown
- Formation of ABC may arise from disruption of the osseous circulation from the primary lesion
- *Fluid levels in fibrous dysplasia may also form due to cystic degeneration, in the absence of secondary ABC formation

Lee JW et al. J Korean Neurosurg Soc. 2010;48:551-554 Faul S et al. Orbit. 1998;17(2):125-132

Differential of solitary osteolytic calvarial lesions

- Hemangioma
- Epidermoid cyst
- Eosinophilic granuloma
- Metastases
- Myeloma
- Lymphoma

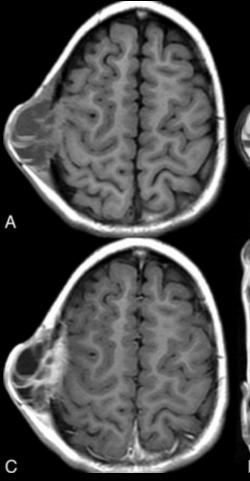
Lee JW et al. J Korean Neurosurg Soc. 2010;48:551-554 Colas L et al. AJR. 2015;205:840-847

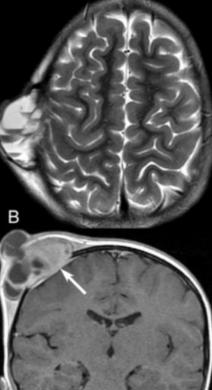
CT and MRI of Pediatric Skull Lesions with Fluid-Fluid Levels

S.A. Nabavizadeh, L.T. Bilaniuk, T. Feygin, K.V. Shekdar, R.A. Zimmerman, and A. Vossough

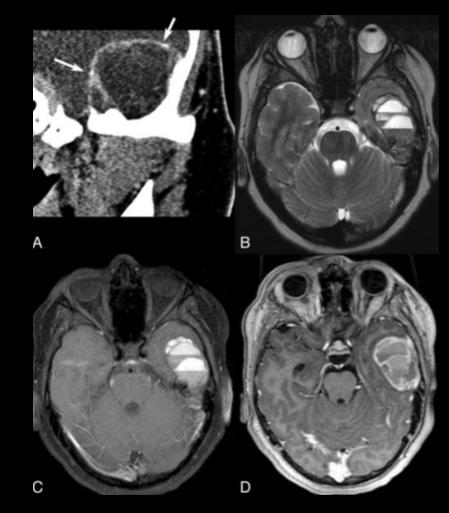
- Retrospective examination of 11 pediatric patients with fluid fluid levels in calvarial lesions
- Diagnoses (in decreasing order of frequency):
 - Langerhans cell histiocytosis
 - Aneursymal Bone cyst
 - Cephalohematoma
 - Metastatic neuroblastoma

Langerhans Cell Histiocytosis





Aneurysmal Bone Cyst



Nabavizadeh SA et al. Am J Neuroradiol. 2014:1-6

Summary

 Secondary aneursymal bone cyst formation from fibrous dysplasia is rare in the skull

 There are several differential diagnoses of calvarial fluid-fluid levels, which differ between the pediatric and adult population

References

- Colas L et al. Skull Vault Lesions: A Review. AJR. 2015;205:840-847
- 2. Faul S et al. MRI features of craniofacial fibrous dysplasia. Orbit. 1998;17(2):125-132
- Gaopande VL et al. Polyostotic fibrous dysplasia with secondary aneursymal bone cyst in tibia. J Orthop Allied Sci. 2015;3:19-21
- Lee JW et al. Fibrous Dysplasia with Aneurysmal Bone Cyst Presenting as Painful Solitary Skull lesion. J Korean Neurosurg Soc. 2010;48:551-554
- 5. Nabavizadeh SA et al. CT and MRI of Pediatric Sull Lesions with Fluid-Fluid Levels. Am J Neuroradiol. 2014:1-6