



## Cavernoma of the Pons: Cranial MRI Findings

### *Pons Kavernomu: Kranial Manyetik Rezonans Görüntüleme Bulguları*

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Loss of strength and imbalance complaints that a 57-year old male patient started experiencing in the post-operative period increased in recent months, with speech disorder and difficulty in swallowing complicating the picture in the last few days. The patient had undergone a renal transplant due to chronic kidney failure a year ago. His medical history had diabetes mellitus type 2 and coronary artery disease. Neurologic examination showed dysarthria, decrease in gag reflex and left ataxic hemiparesia. Cranial MRI showed a 10x9x11 mm lesion consistent with acute hemorrhagic cavernoma in the right half of the pons (Images 1,2). Following a neurosurgical consultation, the recent clinical deterioration was thought to be due to intra-cavernous hemorrhage and follow-up was decided. The neurological examination performed a month later showed that his speech and ataxia had partly improved and his difficulty in swallowing had decreased.

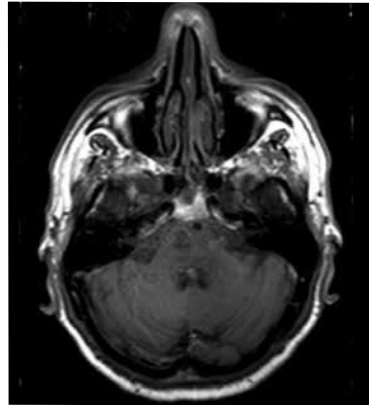
The incidence of central nervous system cavernomas is between 0.4% and 0.9% (1). On the other hand, the frequency of detecting a cavernoma in the brainstem varies between 10% and 23%, with pons being the most common localization (2). Typical radiological findings in cranial MRI help diagnosis. While some authors recommend surgery in early stages in this localization, some prefer a conservative approach due to the high morbidity in the post-operative period (3).

**Key words:** Cavernoma, pons

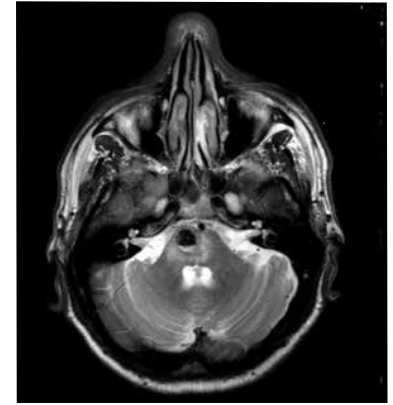
**Anahtar Kelimeler:** Kavernom, pons

### References

1. de Aguiar PH, Zicarelli CA, Isolan G, Antunes A, Aires R, Georgeto SM, Tahara A, Haddad F, et al. Einstein (Sao Paulo) 2012;10:67-73.
2. Sandalcioğlu IE, Wiedemayer H, Secer S, Asgari S, Stolke D. Surgical removal of brain stem cavernous malformations: surgical indications, technical considerations, and results. J Neurol Neurosurg Psychiatry 2002;72:351-355.
3. Cavernous malformations of the brainstem. Haque R, Kellner CP, Solomon RA. ClinNeurosurg. 2008;55:88-96.



**Image 1:** Izo-hypointense (hyperacute, acute) and occasionally hyperintense (early subacute) signal changes are seen due to the hemorrhagic contents in various stages within the cavernoma in axial T1 weighted section.



**Image 2:** Fluid leveling due to hemorrhagic contents in various stages is present within the cavernoma in axial T2 weighted section; hyperintense signal change due to edema is seen around it.