Factors involved in delayed diagnosis of dural arteriovenous fistulas

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Objectives: To know and identify factors involved in delaying making definite dural arteriovenous fistulas diagnosis.

Method: Retrospective analysis of 25 consecutive patients with dural arteriovenous fistulas referred to Prasat neurological institute, Bangkok, Thailand.

Results: Dural Arteriovenous fistulas were found in patients at age ranging from 32-74 years old. They are mostly found at cavernous sinus (40%), transverse-sigmoid sinus (35%) respectively. At these locations patients usually present with headache, exophthalmos and opthalmoparesis (70%, 65%, and 38% respectively) which are resemble with other common neurological diseases. CT brain, MRI or MRA brain were selected to examine in every patients. Average delayed time before definite diagnosis is 1.5 months. Factors involved in delayed diagnosis are unrecognizing symptoms mimicking common neurological diseases (60%), choosing improper neuroimaging (60%) and overlooking subtle abnormalities in those neuroimaging (45%).

Conclusions: Keeping in mind that headache, exophthalmos and opthalmoparesis can be presentation of dural arteriovenous fistulas particularly in middle-age to elderly patients and selecting proper initial neuroimaging as well as meticulous interpreting would help to achieve correct diagnosis and be able to start treatment in timely fashion.