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# AN OLD PATIENT WHOM COLLOIDAL CYST EXISTS IN THE 3RD VENTRICLE WITH CATATONIC DEPRESSION AND BIPOLAR AFFECTIVE DISORDER

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#### **ABSTRACT**

Colloidal cysts most frequently localized into anterior part of 3rd ventricle are mostly asymptomatic, may cause serious morbidity and mortality according to their localization. They may cause personality and affective changes beyond headache, focal neurologic symptoms and cognitive changes. In this study, we aimed to discuss a patient whom colloidal cyst exists in the 3rd ventricle with depression including catotonic features, followed with hypomanic and manic episodes.

#### INTRODUCTION

Colloidal cysts, usually localized into the rostral part of 3rd ventricle are rarely seen bening tumors. Colloidal cysts comprise 0,5-1% of all brain tumors and 15-20% of intraventricular tumors. Most frequently seen in the period of 20- 40 years [1,2]. The clinical presentation of these endodermal origin, congenital tumors is variable. As asymptomatic individuals may be seen, due to increased intracranial pressure and ventricular volume, neurologic symptoms as dementia, walking difficulties, memory impairments and epileptic seizures may occur. Hallucinations, personality changes, mental problems and entellectual loses may be associated with colllidal cysts.

#### **CASE REPORT**

H.O. is a 64 years old, graduated from primary school, retired, married, having two children, male patient. He applied to our outpatient clinic with complaints of losing appetite and weight, sleeplesness, amotivation, agitation, losing of selfcare, speech and urinary incntinence increasing in the last two month.

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Before applying to psychiatry, his examination and laboratory findings by done by internal medicine nad neurology were in the normal limit. He had began the treatment of essitolapram 20 mg/d, olanzapin 2,5 mg/d one month ago, but the patient did not use his medication regularly. He had not any history of organic pathology and alcohol or substance abuse. His physical examination was in normal range. In his routine laboratory findings, any pathology was not seen. His mental state examination was evaluated as selfcare decreased, outlook was bad, psychomotor activity was decreased, eye contact existed but was not maintened, amotivational to interview and in a catatonic manner. Concsious, orientation to place and person were enough, to time was impaired. Difficulty in focusing and maintaining attention were present. He partially opened his thought content, thoughts of guiltiness and invalublessness were present. Speed of thought process was decreased, his association was likely to loosen. Reaching to the aim was partial. Spontanity of speech was absent, he was giving anwers to the questions sometimes with eye movements. Any perceptional anomaly was not described. Affect was labile and sad, mood was depressed and anhedonic. In his personal and family history, any significant feature was not described. Hamilton Depression Scale (HAM- D) [5,6] and Standartized Mini Mental Test (SMMT-L) [7,8 ]were given. His HAM- D score was 34 and SMMT- L score



was 16. Assessment of the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) [9,10] was Major Depressive Episode with catatonic features. Venlafaxine 75 mg/d and ketiapine 50 mg/d treatment began, electroconvulsive treatment was planned, in accordance with neurologic and internal medicine consultation. In his cranial CT scan, atrophy was detected and cranial MRI and encephalagram were planned. His transtoraxic electrocardiogram and cardiologic examination was normal except primary mitral regurtitation. After evaluation by internal medicine, cardiology and neurology, any pathology was not detected for application electroconvulsive therapy. Four times electroconvulsive therapy were applied. In the 3rd week of hospitalization, depressive complaints declined, he began to communicate and eat. His HAM- D score was 15. He re-consulted to neurology with result of cranial MRI scan, neurosurgery evaluation was recommended due to probability of presence of cyst in the 3rd ventricle. Result of the consultation of neurosurgery outpatient clinic was findings of 1,5 cm colloidal cyst in the 3rd ventricle in cranial MRI scan, ventricular ectogy and urinary incontinance might be associated with cyst and his operation was prior to his psychiatric treatment. He was dicharged with the treatment of venlafaxine 150 mg/d and ketiapine 50 mg/d. He was evaluated after cyst excision in the outpatient clinic, his HAM- D score was 8, complaints were significantly declined, urinary incontinance did not repeat. His cranial MRI scan after the operation indicated mild asymetric dilatation(secondary to operation) in the anterior horn of right lateral ventricule, localized fluid approximately 1,5x 3 cm2 in operation side and defect in the right parietal bone due to operation. Any recurrence or residue were not seen in this case. Any signs was not seen related with small vessel disease and diffuse cortical atrophy. Continuation of the treatment was recommended. But after one month, in his control due to complaints of talkativeness, laughing, decrease in the amount of sleep time, his antidepressant treatment was stopped by declining dosages, his symptoms was stabilezed by increasing the ketiapin dose up to 100 mg/d. In his followup, after 3 months he was hospitalized with the diagnosis of manic episode with complaints of jealousy of his wife, increase in the religional occupancy, not eating the food of her wife made, hostile behaviours, decrease in the amount of time and restlesness.

#### DISCUSSION AND CONCLUSION

Pathologic formations in the brain, frequently cause epileptic seizures, headache and focal neurologic symptoms. Beyond them, they may cause psychiatric symptoms like cognitive changes, slowing down in the speech rate, difficulty in the maintainance of mental functions, loss in the interest towards daily activities, personality changes and losing ability of hearing of the voices with high frequency [11]. They may be evaluated as anxiety, depression or astenia.

Colloidal cyts comprise 0, 5-1% of all intracranial tumors [12]. In the literature, colloidal cysts most frequently localized in anterior part of 3<sup>rd</sup> ventricle but their localization may be in the optic chiasma, sellar area, cerebral convexity, lateral ventricule, septum pellicidium, posterior part of 3<sup>rd</sup> ventricle, brainstem, subarachnoid space and medulla spinalis. Colloidal cysts named as neuroepithelial tumors are slowly-growing bening tumors. They are mostly localized in the rostral part of 3rd ventricule. They are mostly observed in females than males. They may occur any age and become symptomatic in the 3<sup>rd</sup> to 6<sup>th</sup> decade. Even though they are asymptomatic and in bening histopathology and small size when they localize in the critical places due to compression they may cause serious mortality and morbidity. As incidentally diagnosed cases exists, cases diagnosed with the symptoms of papilodemea, ataxia, impairment in the visual field, urinary incontinence, shortterm memory impairment, seizure, nausea, vomiting, confusion, hearing loss or normal pressured hydrocephaly exits [1,15]. Patients mostly applied with the complaint of headache (68-100%) which terminate in the seconds or minutes, worsing or relaxing with positional changes. even they are bening in histopathology, they may cause acute hydrocephaly, brain herniation and sudden death by obstructing the foramen Monro [16]. The mental signs caused by tumor and cyst-like structure in the brain may occur when thalomocortical structures, cerebral white matter, long fiber systems, frontal, temporal cortex and corpus callosum are affected [17]. Mental signs found in the 94% of temporal lobe tumors, 90% of frontal lobe tumors, 47% of infratentorial tumors. In another study, personality changes are determined in the 18% of cases [11]. 3<sup>rd</sup> ventricular colloidal cysts, by compression of diencephalic structure may result in dementia-like symptoms [18]. Localizations of tumors causing catatonia are 3<sup>rd</sup> ventricle, periventricular area and corpus callosum [19]. Similar to our case, in a male patient accompanied by severe headache and depressive symptoms, epidermoid cyst in the pineal area neighbouring the posterior part of 3<sup>rd</sup> ventricule. Symptoms are declined by excision of the cyst [20].

ECT range in the first rank of catatonia treatment [21] is contraindicated in the presence of intracranial lesion, despite this knowledge lots of depressive patients with catatonic features who has arachnoid cystlike structure are known to be treated with ECT [22,23]. Besides, a case with any pscyhiatric history was not observed before and catatonia was observed for a long time has shown to have cystic structure in his cranial MRI scan [24]. In our case, with normal cranial CT findings and internal?? parametres ECT was started and after four session of ECT his depressive symptoms regressed, urinary and stool incontinence detoriated after cyst excision.

Our case which colloidal cyst in the 3rd ventricle and atrophic changes in the cortex were seen,



pscychomotor reterdation and vegetative symptoms regressed with the treatment of ECT and antidepressant therapy, but urinary and stool incontinence was detoriated after cyst excision. All these findings made us to think that existing pscyhiatric picture was caused by organisity or accompanied with organisity. After clinical remission, the patient developed hypomania in his controls and dose of

the antidepressant treatment was declined but afterwards diagnosis progressed to manic episode with psychotic features. As a result, while treating the late-onset cases which do not have psychiatric history before, general medical conditions should not be ignored and it should be keep in mind that organic pathologies may precipitate underlying bipolarity.

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