MENTAL DISORDERS IN PITUITARY ADENOMAS

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Objectives:

Aim of the study was a comparative assessment of the structure of mental disorders in various types of pituitary adenomas.

Background:

There is an association between pituitary adenomas and mental disorders; however, their links to the type of adenoma have not been studied sufficiently [1,2].

Materials and Methods:

The patients with different types and hormonal secretion activity of pituitary adenomas were studied. The prolactinoma (P) group included 67 patients (all female, aged 34,0±10,4 years). The somatotropinoma (ST) group included 82 patients (F/M=67/15, aged 55,7±13,7 years). The corticotropinoma (CT) group comprised 66 patients (F/M=57/9, aged 40,4 ±13,5 years). The patients underwent psychiatric interviewing with MINI-6 and were tested with MMPI.

Results:

The prevalence of mental disorders in hormonally active pituitary adenomas reached 75,1 - 79,3%. The prevailing disorders in patients with P were the neurotic spectrum disorders (35,8%), as well as affective disorders (22,4%). The patients with ST most frequently demonstrated mood disorders (51,2%) and organic mental disorders (17,1%). In those with CT, affective disorders were the most frequently identified (59,1%), as well as neurotic disorders (15,2%). Special attention merits the high frequency of bipolar spectrum disorders in ST (46,3%) and CT (45,5%). Besides the MMPI scales scores in patients depending on the type and activity of hormonal secretion were also significantly different

Conclusions:

- Hormonally active pituitary adenomas are associated with increased prevalence of mental disorders. Their frequency and underlying behavior patterns are related to the type and activity of hormonal hypersecretion.
- The high comorbidity of bipolar spectrum disorders and pituitary adenomas is of special interest.

References:

1. Bobrov AE, Starostina EG, Alexandrova MM. Mental disorders in patients with acromegaly// Zh Nevrol Psikhiatr Im S S Korsakova. 2016;116(9):18-23. doi: 10.17116/jnevro20161169118-23. Russian. PMID: 27735894

2. Bobrov AE, Starostina EG, Alexandrova MM, Almaev DR, Pavlova MG, Komerdus IV, Belaya ZhE, Melnichenko GA. Mental disorders in patients with hormonally active pituitary adenomas// Sotsialnaya I klinicheskaya psichiatriya. 2018; 28(4): 5-10

Tab. Main Psychiatric Diagnoses

ICD-10 Diagnostic Categories	Types of Pituitary Adenomas						p (Fisher test)
	Prolactinomas		Somatotropinomas		Corticotropinomas		
	n	%	n	%	n	%	
Organic mental disorders (F00-F09)	1	1,5	14	17,1	0	0	0,00
Schizophrenia spectra disorders (F20-F29)	1	1,5	3	3,7	1	1,5	0,61
Mood Disorders (F30-39)	15	22,4	42	51,2	39	59,1	0,00
Neurotic, stress-related and somatoform disorders (F40-F48)	24	35,8	6	7,3	10	15,2	0,00
Behavioural syndromes associated with physiological disturbances (F50-59)	3	4,5	0	0	0	0	0,04
Disorders of adult personality and behaviour (F60-69)	6	9	1	1,2	1	1,5	0,03
Mental Disorders Total	50	74,6	66	80,5	51	77,3	0,69
TOTAL	67	100,0	82	100,0	66	100,0