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DETECTION OF PRIMARY HYPERPARATHYROIDISM THROUGH OPPORTUNITY SCREENING

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Primary hyperparathyroidism (PHPT), which was once considered rare, is a common disease of mineral metabolism and is currently the third most common pathology of thyroid disease and diabetes [1, 2].

The insidiousness of the disease lies in the low level of diagnosis and the multisymptoms of clinical manifestations, which later, as a result of untimely diagnosis, lead to a complex symptom of a severe course of the disease with the development of severe disabling complications - osteoporotic fractures, recurrent stone formation in the urinary tract and nephrocalcinosis with renal failure, gastrointestinal bleeding, cognitive disorders, etc., as well as an increased risk of premature death [3, 4].

Screening in the health care system is the active identification of a disease in persons who were considered or considered themselves to be healthy, that is, detection of the disease at a preclinical stage. The main goal of screening is to detect the disease before it causes symptoms and complications and, if possible, to completely cure it [5, 6]. In contrast to population screening, which is performed among all individuals considered to be at risk (usually within national programs), opportunistic screening is performed to prevent or detect disease when people seek medical care for a specific condition. symptom or complaint, and doctors take the opportunity to offer them various other tests, taking into account the age and gender of the patients.

Questionnaire is an important, convenient, non-invasive, inexpensive and, therefore, available for use in ambulatory polyclinic practice as a screening method for PHPT risk factors. It is believed that the inclusion of this method in the system of preventive examination at the ambulatory polyclinic stage will allow not only to more

fully identify the factors leading to the development of calcium metabolism disorders, but also to speed up the work of the primary care physician.

Goal. Development of a questionnaire for opportunistic screening of primary hyperparathyroidism.

Materials and methods. To assess the significance and prevalence of patients' complaints, the first group consisted of 50 patients (49 women and 1 man, aged 54.07 ± 4.6 years) who were operated on during 2021-2023 with a diagnosis of PHPT, including 37 with a mild clinical picture and 12 with pronounced clinical manifestations. The control group/comparison group consisted of 138 patients (108 women and 30 men aged 53.71 ± 5.8 years) without PHPT, who sought medical help during 2021-2023 in connection with thyroid pathology at the clinical units of the State University " IPEP".

To determine the features of the course of the disease depending on an age in the future, all patients with PHPT and individuals from the control group were divided into 3 groups by their age:

Group I ≤ 40 years (8 and 25 patients, respectively);

Group II - from 40 to 60 years (26 and 72 patients);

Group III > 60 years (16 and 41 patients).

The results. Patients of the main group (diagnosed with PHPT) and the control group (who sought help for thyropathology) had complaints recorded, questions about symptoms that could be a consequence of undetected hyperparathyroidism were clarified, and the presence of concomitant pathology was also recorded. The obtained information was entered into a table that took into account the number of detected changes and their frequency in groups with confirmed PHPT and without it (table 1.)

Table 1

Clinical symptoms and accompanying pathology in groups of patients with PHPT and without PHPT

№	Complaints at the time of inspection patients	Observation group, number of observations			
		Number questionnaires of patients with PHPT n = 50	Percentage of the number of patients with PHPT n = 50	Number questionnaires of patients without PHPT n = 138	Percentage of the number of patients without PHPT n = 138
1	2	3	4	5	6
1	Are you satisfied with your current level of health?	11	22	53	38
2	Have you applied for medical aid during the last year?	27	54	89	64
3	Did your relatives have diseases related to calcium metabolism disorders?	1	2	8	6

Continuation of Table 1.

1	2	3	4	5	6
4	Over the past 3 years, have you noticed any of the following symptoms/complaints:				
4.1	Chronic pain in the upper and lower limbs	35	70	52	38
4.2	Deterioration of memory, attention	35	70	68	49
4.3	Pain in bones, joints	35	70	67	49
4.4	Deterioration of mood	33	66	86	62
4.5	Pronounced weakness, especially in the morning	33	66	65	47
4.6	Increased blood pressure	30	60	67	49
4.7	The presence of pain in the area of the heart	26	52	52	38
4.8	Tendency to constipation	24	48	45	33
4.9	Deterioration of vision	24	48	61	44
4.10	Shortness of breath at rest or with slight physical exertion	24	48	51	37
4.11	Difficulty concentrating	23	46	48	35
4.12	Pain in the upper abdomen, heartburn, nausea	19	38	38	28
4.13	Decreased intellectual abilities	17	34	36	26
4.14	Presence of polyuria	14	28	29	21
4.15	Change of gait	13	26	32	23
4.16	Pain in the projection of the kidneys	13	26	20	14
4.17	Presence of polydipsia	12	24	27	20
4.18	Presence of dysuria phenomena	11	22	11	8
4.19	An increase in the level of sugar in the blood	11	22	26	19
4.20	Decreased growth	10	20	10	7
4.21	Loosening and loss of healthy teeth	8	16	21	15
4.22	Decrease in body weight	8	16	25	18
4.23	Spontaneous or low- energy fractures	5	10	11	8
5	Have you previously had/or are you currently suffering from:				
5.1	Osteochondrosis	35	70	77	56
5.2	Hypertensive disease	35	70	55	40
5.3	Coronary heart disease	16	32	21	15
5.4	Chronic cholecystitis	13	26	46	33
5.5	Chronic pancreatitis	12	24	46	33
5.6	Urinary stone disease, nephrocalcinosis	12	24	11	8
5.7	Gout, gouty polyarthritis	10	20	9	7
5.8	Ulcer disease of the stomach or duodenum	7	14	13	9
5.9	Thyroid disease	6	12	115	83
5.10	Depression	6	12	31	22
5.11	Fractures of limbs	9	18	23	17

The obtained data made it possible to assess the importance of one or another symptom for the development of PHPT.

When analyzing complaints in different age groups, significant differences in the clinical profile of patients were found. In people under the age of 40, the leading clinical manifestation was disorders of a mental and intellectual nature, a decrease in visual acuity, then bone-destructive phenomena (pain in the limbs, change in gait, etc.), the presence of hypertension, loosening and loss of healthy teeth. In the groups of 40-60 years and people over 60 years of age, the survey shows a more classic clinical picture: the main complaints were bone-degenerative manifestations. There was no significant difference found between patients with PHPT and conditionally healthy persons or persons with other pathologies.

Conclusions.

1) The developed version of the survey questionnaire makes it possible to detect PHPT at an early stage.

2) Taking into account the variety of manifestations of the disease, in connection with which patients are often patients of doctors of various specialties, there is a need to screen patients using a questionnaire at the stage of primary care.

3) Cognitive disorders in young patients may indicate the early onset of PHPT.

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