



Clinical and Functional Characteristics of Patients with Acne and Functional Dyspepsia

Akramova Nodira Shuxratovna

Bukhara State Medical Institute Named After Abu Ali Ibn Sina

Relevance. Thanks to the conducted studies, this pathology – acne, is considered to be an inflammatory disease with a chronic course, manifested in the form of papules, pustules and inflammatory nodes on the skin. And as the researchers' data show, the development of this disease is primarily based on violations of immune protection, which explains the multifactorial nature and various symptoms of acne. The pathological transformations of immunity are also influenced by the factors of the presence of so-called skin on the surface. conditionally pathogenic microorganisms in the form of Propionibacterium acne, parasitic and yeast-like fungi, mites of the genus Demodex, etc. All this together aggravates the course of the pathological process, leads to a malfunction in the mechanisms of formation of an adequate immune response, contributes to a change in the balance of anti-inflammatory cytokines and other inflammatory mediators, which, according to a number of researchers, leads to the chronization of the course of acne, the appearance of difficult-to-treat relapses [1.3.5.7].

Recently, there have been data on the role in the pathogenesis of acne development of the presence of mechanisms of innate immunity that contribute to the formation of homeostasis of the skin, the violation of which is the starting point for the appearance of acne. However, this point of view remains controversial and needs further research.

In accordance with the goals and objectives of the study, we conducted a retrospective analysis of the medical histories of patients treated at the Republican Skin and Venereological Hospital in Tashkent from 2019 to 2021. The total number of case histories was 8428 pieces. Of these, 4,124 were men (48.9%) and 4,304 were women (51.0%). From the total number of case histories, 448 case histories of acne patients were allocated to a separate group as a 3-year sample. In this sample of medical histories, 125 patients were diagnosed with diseases of the gastrointestinal tract, in particular PD, which is about 28.0% of the total number of patients with acne. Based on the data obtained, it can be assumed that hiloriassociated acne occurs in 28% of patients with acne, while functional dyspepsia is most often observed, which further worsens the course of the pathological process in patients with acne.

The studies of the chief gastroenterologist of the Republic of Uzbekistan Karimov M.M. et al., 2019, found that the prevalence of *N. pylori* in Uzbekistan on average exceeds 80% in the population. Uzbekistan belongs to the regions with a high degree of infection of the population with helicobacter infection.

Thus, the results obtained in the course of the study radically differ from the data provided on the prevalence of Hp in the population of Uzbekistan 80% versus 51.9%, which indicates a difference in the perception of the real epidemiological situation in terms of the prevalence of helicobarcteryl infection in the region. These conclusions can be argued by an insufficiently proven study of the patient's life history, the history of the course of the disease at the stage of hospitalization of the patient in a dermatological hospital [2.4.6.8.10.12.14.16].

The total number of selected patients with acne on the background of PD was 127 patients, of which 50 (39.2%) men and 77 (60.8%) women aged 17 to 35 years (Table 3). As can be seen, according to the hederic sign, female patients prevailed, while the average age of patients was 24.1 ± 0.8 years.

Table 1 Distribution of acne patients on the background of PD by age and gender

Paul / Age	16-21 years		Older 22 years		Total patients	
	abc.	%	abc.	%	abc.	%
Women	59	46,8	18	14,3	77	61,1
Men	42	33,3	7	5,6	49	38,9
Total patients	101	80,1	25	19,9	126	100

Acne with functional dyspepsia was significantly more often detected in the age range from 15.8 to 22.4 years in 77 (60.8%) patients, while the duration of acne in such patients has a wide range of data ranging from one year to 6-7 years or more. As our studies have shown, the main group consisted of patients with the duration of the disease from one to five years, which amounted to about 62.0% of the total number of patients with this pathology.

According to clinical manifestations and forms: patients with ordinary acne with papulo-pustular form of the disease were 80 (63.8%), late acne – 22 patients (17.7%), with conglobate acne - 24 (19.0%) patients. At the same time, mild acne was diagnosed in 34 patients (26.8%), moderate in 68 patients (54.7%), severe acne was detected in 24 patients, which was 19.3%, respectively. According to gender, the average severity was detected in 50 (39.7%) women, while severe acne prevailed in males, which amounted to 13 (10.3%), respectively (Table 2).

Table 2 General characteristics of acne in patients with functional dyspepsia

Clinical forms	Easy (n=34)		Average (n=68)		Heavy (n=24)	
	Жен.	Муж.	Жен.	Муж.	Жен.	Муж.
Common acne (n=80)	16	18	32	14	-	
Late acne (n=22)			18	4		
Conglobate acne (n=24)					11	13
Total	16	18	50	18	11	13

At the same time, comedonal and papulo-pustular with the presence of up to 10 elements of acne forms were attributed to mild severity, papulo-pustular with the presence of more than 10 elements and nodular (up to 5 nodes) - to medium, and nodular (conglobate) - severe. In mild form, mainly multiple non-inflammatory elements were diagnosed - open and closed comedones.

With an average form - against the background of excessive sebum secretion, multiple macrocomedones, hemispherical papules of bright red color, pustules, single serous-purulent crusts localized mainly on the skin of the face, with individual elements on the skin of the chest and upper third of the back prevailed. The severe form of UB was clinically manifested by macrocomedones, inflammatory papules and pustules, multiple infiltrated deep dermal and subdermal nodes,

Clinical symptoms of UB in patients with PD were characterized by pronounced polymorphism of rashes at all degrees of severity of UB.

49.3% of patients had rashes only on the face, 24.6% had a combined lesion of the face and back, and 26.1% had various combinations of the process in the skin of the back, chest, neck, and scalp (Table 3).

Table 3 Localization and level of skin changes

Localization	Number of patients acne	%
Face	62	49,3
Back	9	7,2
Back, chest	5	3,9
Face, back	31	24,6
Face, back, chest	15	11,9

Face, back, neck	1	0,7
Face, in/h of the head	3	2,3
Total:	126	100

The largest number of patients were with facial skin lesions 62 (49.3%), then the face and back at the same time 31 (24.6%), and the number of face, back, chest was 15 (11.9%). The following factors led to the exacerbation of the disease: the autumn-winter period of the season - in 36.7% of patients, disorders in the diet and the nature of nutrition (mainly carbohydrate) - in 38% of patients. Female patients noted exacerbations of the disease with menstruation and menstrual cycle disorders – 12.3%, the presence of gastrointestinal diseases was noted by 62.9% of patients. Changes in neurological symptoms and psychosomatic disorders were observed in 42.7% of patients [11.13.15].

Conclusion

1. Retrospectively, the indicator of simultaneous detection of U and pathology of the gastrointestinal tract, in particular functional dyspepsia, is 28.6% of the total number of patients with acne in a dermatological hospital. In 80.2% of cases, the development of functional dyspepsia is caused by H. Pylori infection.
2. In patients with VU and PD, regardless of the severity of acne, the IL-1 β index in the blood serum before treatment exceeds normal values by 2.1-3.7 times, so in patients with mild acne severity - 3.12 ± 1.82 pg/ml, moderate - 3.22 ± 1.42 pg/ml and severe degree of the process- 3.36 ± 1.22 pg/ml, respectively.
3. Studies of the immunological status indicate the activation of the production of components of the proinflammatory cytokine system (IL-1 β , IL-2 and VEGF repair marker) in patients with IUI PD against the background of reduced indicators of anti-inflammatory mediators (IL-4 and IFN γ), leading to the chronization of the inflammatory process, pronounced resistance to conventional acne therapy protocols.

LITERATURES

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