

The State of Allergic Service and Spread of Allergic Diseases in Ukraine

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Abstract

The article deals with the state of allergy services in Ukraine: the organization of the disease identification, further examination and treatment. The advantages and disadvantages of the organization of the service are pointed out. Particular attention is paid to the know-how: the organization of allergy screening and oral specific immunotherapy of allergic diseases by the help of mixtures of allergens introduced into sugar pills.

There are many reasons to say that the development of allergology in Ukraine is not behind that of the developed world and in some respects - is better. In the field of scientific research allergology in Ukraine is a lag behind. As for the development of allergy services, training, technological and methodological aspects - these aspects are up to date.

Organization of allergic diseases (AD) identification. In contrast to the period of 1980-1995, when Ukraine conducted extensive clinical and epidemiological studies aimed to identify AD, nowadays, as in most countries of the world, identifying AD in Ukraine is passive, although there is every reason to believe that the presence of five climatic and geographical zones, different urbanization levels and anthropogenic influence on ecology result in different level of allergic diseases spread.

According to many years' reporting materials from regions of Ukraine, selective epidemiological studies we can assume that the spread of AD in Ukraine is in the range of 25-30%. Among them the frequency of hay fever in adults is in the range of 6-8%, persistent allergic rhinitis - AR is in the range of 6-8%, allergic bronchial asthma - 4-6%, atopic dermatitis - 3-4%, chronic urticaria - 2-3%, drug allergy - 2%, insect allergy - 0.5%. Among children the incidence of hay fever,

urticaria is significantly lower but atopic dermatitis is higher.

In Ukraine the availability of allergists per 10,000 of population is low, and makes 0.05 for adults and 0.12 for children respectively (on average - 0.07 per 10,000 people). The availability of allergy rooms is also low (Table 1), which are concentrated mainly in the regional centers and major cities:

Table 1

The security of the population of Ukraine (per 10,000 people) by allergists and infrastructure.

Allergic Service	Rooms		Beds	
	ABS	per 10000	ABS	per 10000
Therapeutic	107	0,03	935	0,27
Pediatric	75	0,07	580	0,56
Total	182	0,04	1515	0,33

So most patients suffering from AD are identified by general practitioners (primarily physicians and pediatricians, as institution of family doctors in Ukraine only develops, and otolaryngologists, dermatologists. That is why the quality of diagnostics and treatment of AD is not always satisfactory.

The inadequate is pre-and post-graduate medical training in universities in the field of clinical allergy. The official statistics of AD is very imperfect as well, as it only registers bronchial asthma, allergic rhinitis, atopic and contact dermatitis.

To improve the situation we have created a set of AD screening. The initial version of

it included 7 vials of mixed-allergens (pollen and common household allergens, control solutions, plastic lancets for prick test).

Modern version of the kit for AD screening contains compact plastic lancets for prick test, in the pre-cap of which the appropriate mixed-allergens and control solutions are introduced. Lancets are available in 2 versions (with one or five needles) and, like the set itself, have no direct analogues in the world. Unfortunately, despite the presence of the corresponding order of Ministry of Health of Ukraine, this method in Ukraine is not "settled." Perhaps now, due to the reorganization of the Health Service of Ukraine into family medicine, this method will be adopted by family doctors.

Examination of AD patients by allergists. The examination of patients in an allergist consulting room includes physical examination, skin testing with the relevant allergens spirometry (in patients with suspected asthma), if necessary - advice from related specialists (otolaryngologists, dermatologists) and laboratory testing. It should be pointed out that in Ukraine about 180 kinds of pollen, household, food, epidermal, insect, fungal allergens made of regional materials and having a sufficiently high specificity have been registered by Vinnitsa enterprise "Immunolog". Most medical institutions can also make the determination of total and specific IgE. Usually, this is enough for giving a diagnosis or patients are being monitored. Unfortunately, in Ukraine there is no Institute of Allergy and other senior advisory center, which could assist in difficult diagnostic cases. In addition, the economic crisis which touched on the medical institutions of Ukraine has a negative impact on the work of Allergic Service of Ukraine.

However, as can be seen from **Table 2**, skin allergy diagnostics in Ukraine is annually improving:

Table 2 Specific diagnostics and allergen-specific immunotherapy (SIT) of AD in Ukraine

Years	Skin allergy diagnostic made		Got SIT in regions of Ukraine	By parenteral method	By oral method
	totally	by prick-test			
2007	49920	25600	7000	4000	3000
2008	54480	30840	15302	11459	3843
2009	61200	33260	14113	10582	3531
2010	88880	41120	15037	11346	3691
2011	53840	42540	15132	11951	3181
2012	181360	55360	17422	13180	4242

The only regrettable fact is that the proportion of allergy rooms' patients examined by skin prick test is still less than 30%. And this despite the fact that the skin prick test is the most objective, standardized, safe and attractive method of skin allergodiagnosics. Besides, 2 versions of lancets to prick test with no direct analogues in the world are produced in Ukraine.

We do not discuss issues of laboratory allergodiagnosics, as for this purpose foreign test systems are used in Ukraine which are manufactured by using only raw materials harvested outside Ukraine. In this regard, they are not specific enough and SIT is impossible on their results.

Treatment of patients with AD. It must be stressed that allergists and not only allergists in Ukraine are well aware of consensus documents adopted by international organizations for most AD (GINA ARIA, etc.). They form the basis of

national reports to assist at certain cases of AD. Moreover, Ukraine has published and republished AD patients care protocols (separately for adults and children) which have the appropriate forms. The rehabilitation of patients with respiratory AD in conditions of speleohospital is conducted.

Unfortunately, as elsewhere, there is competition in the approach to the treatment of patients with AD. Despite the fact that every year about 20,000 AD patients in Ukraine are treated with allergen-specific immunotherapy (SIT) - **Table 2**, it is estimated that no more than only 8% of the patients are treated by this method.

In 2011, the Institute of Otolaryngology of the National Academy of Sciences conducted an experimental study that proved the efficacy of parenteral and oral SIT allergens of domestic production. It should be noted that oral SIT in Ukraine is conducted by usage of slowly absorbable oral pills which include cold-rolling mixture of household or pollen allergens and has no direct analogues in the world. There is every reason to believe this approach is more effective than sublingual SIT when the mouth water-glycerol droplets are used.

We hope that constant training of allergists, publishing of important international documents (the "White Paper VAO", "Declaration on EAASI SIT", 2011) will increase the use of SIT method in our country.

Ukraine is among the countries with developing economy, that is why economic aspects of AD treatment are very important for our patients. In this regard it should be noted that in the presence of all the groups of most advanced AD treatment, the cheapest

drugs often get preference. But even in this case, SIT is much more economical than the constant AD pharmacotherapy. Consequently, we are working to improve the early identification of AD, the wider use of specific methods of diagnostics and treatment, their rational pharmacotherapy.

To the above mentioned it must be added that Ukrainian allergists participate in the public organization "Association of Allergists of Ukraine." Its members hold regular scientific conferences, have held three national Congresses of Allergology, regularly participate in international forums, including the constant contact with colleagues from Moldova.

Literature.

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