

УДК 616.3:616.248+616.24-007.272-07

*S.V.Kovalenko¹, A.E.Dorofyeyev², M.V.Patraty¹, Yu.F.Marchuk¹***COMPARISON OF THE CLINICAL DIAGNOSTIC PICTURE OF PRIVATE FORMS OF PATHOLOGY OF THE DIGESTIVE SYSTEM OF BRONCHIAL ASTHMA AND CHRONIC OBSTRUCTIVE PULMONARY DISEASE**¹Bukovinian State Medical University (Chernivtsi),²National Medical University (Donets'k)

Abstract. The paper discusses the incidence and the clinicodiagnostic picture of a combination of chronic obstructive pulmonary disease (COPD) and bronchial asthma (BA) with concomitant diseases of the digestive tract. The basic consistent patterns of a combined course of these

particular diseases confirmed by a special analysis are singled out.

Key words: chronic obstructive pulmonary disease, bronchial asthma, digestive system.

Introduction. Diseases of the digestive system (DS) are one of the most frequent pathology and serious forms of visceral pathology combined with bronchial asthma (BA) and chronic obstructive pulmonary disease (COPD) and they contribute to the formation of mutual aggravation [1, 2]. An association of chronic inflammatory diseases of the respiratory organs with gastroenterological ones stipulates to a corresponding prognosis [4]. A detailed analysis of the clinical specific characteristics of a combined variant is often absent in such cases which does not permit to come at more profound conclusions, dealing with a mutual effect on the course, diagnostics, treatment and prophylaxis of exacerbations and recurrences [3]. The topical character of the subject is connected with an accumulation of unsolved pathogenetical, diagnostic and therapeutic aspects of this pathology, with a necessity of proofs of their common character and distinctions with such independent diseases as BA and COPD.

The object of the research. A study of the incidence, structure, risk factors and a clinicopathogenetic group of pathological processes in the DS in BA and COPD patients, a comparative estimation of the degree of the common character of these processes under such diseases.

The object of the research: a study of the rate, pattern, risk factors and clinicopathogenetic constellations of pathological processes in the DS of patients with BA and COPD, a comparative evaluation of the degree of the common character and peculiar features of these processes in case of these particular diseases and an elaboration of the management of these patients on the basis of a differentiated diagnostic and therapeutic approach in the pulmonological in-patient setting.

Material and methods. The authors have analyzed the results of an examination of 197 patients with BA and 235 patients with COPD, undergoing a course of treatment at the pulmonological unit of the Regional Hospital of the City of Chernivtsi and the therapeutic department of Donetsk Municipal Clinical Hospital №3, their number being 134 and 212 patients respectively with DS pathology.

Results. An evident absence of essential differences of compared indices has been detected. It is

indicative of a dominant of the common character of DS pathology with such, it would seem diverse diseases, as COPD and BA and corroborates the conclusion to the effect that the extra pulmonary visceral sphere (illustrated by DS pathology) in case of BA and COPD seems to be more inert and independent in relation to nosological self-dependence of BA and COPD regarded recently a clinical entity.

The pathogenetic basis of pathological processes in the DS in case of BA and COPD is characterized by a considerable general character. A great importance of allergy has been noted, particularly, in case of BA. The incidence of gastroesophageal reflux disease (GERD), erosive-ulcerous lesions of the stomach, symptomatic ulcers, derangements of hepatic metabolism ($r=0,77$), correlated with the rate of manifestations of extrapulmonary allergy, immunoglobulinemia E. As far as COPD was concerned this correlation was traced to a lesser extent. A prolonged intoxication was typical of COPD (without DS pathology $r=0,86$, with pathology $r=0,95$ and underlay subatrophic and erosive processes in the mucous coats of the stomach and duodenum ($r=0,99$). The phenomena were also noted in case of asthma ($r=0,92$). The influence of hypoxemia on the rate of erosive processes and the functional state of the liver: a correlation of the total lung capacity (TLC), the forced expiratory volume in 1s (FEV1) and the rate of erosions of the mucous coat of the stomach for BA made up $r=0,86$, for COPD $r=0,97$, a correlation of TLC and the rate of derangements of metabolic processes for BA – $r=0,99$, for COPD – $r=0,88$.

Side by side with a verification of the signs characteristic of COPD (a greater amount of men over 60 years of age), as well as for BA (allergy), a greater case rate should be noted, when GERD is observed as a complication or proceeds with an exacerbation, both in BA and COPD (more often in COPD). A combined course of exacerbations of the fundamental disease and GERD, a frequent one both in BA and COPD, was observed more often in BA.

A difference of the clinicodiagnostic presentation of chronic gastritis in BA and COPD is not connected with the characteristics of gastritis itself (there are no essential distinctions), but with the specific characteristics of underlying diseases (a greater

Table 1

The rate of basic forms of pathology of the digestive system in case of COPD and BA

Diseases of the DS	Bronchial asthma (n=197)		COPD (n=235)	
	abs	%	abs	%
GERD	11	5,7	8	3,2
Non-ulcer dyspepsia	42	21,2	54	23,1
Ulcerons dyspepsia	30	15,2	29	12,3
Chronic pancreatitis	17	8,5	16	6,9
Chronic cholecystitis	38	19,3	58	24,7
Chronic hepatitis	3	1,3	10	4,2
Steatohepatosis	13	6,7	30	13,1
Intestinal diseases	9	4,7	21	8,9

Table 2

Comparison of intestinal diseases in case of BA and COPD

Indices	BA (27)	COPD (58)	Difference (%)
Men	49,3	78,2	+28,9
Over 70 years of age	46,0	63,2	+17,2
Exacerbations (DS)	28,9	24,3	-4,6
Later lung diseases	21,4	8,7	-12,6
Complication	10,4	19,3	+8,9
Without an exacerbation	59,6	66,5	+6,9
With an exacerbation	39,4	21,8	-17,6
A combination of exacerbations	26,7	24,6	-2,1
Cor pulmonale	19,5	2,6	-16,9
Allergy	41,7	2,7	-39,0

amount of men, suffering from COPD, older than 60 years of age and the signs of allergy in BA).

The difference noted by the authors reflects not so much the peculiarities of peptic ulcer as the peculiarities of COPD in relation to BA. It concerns the demographic indices (a prevalence of men and persons ≥ 60 years of age), as well as a rarity of the allergic history – the program of asthma. The indices indicative of a more frequent exacerbation of peptic ulcer in case of COPD are evident.

The group of patients afflicted with COPD, suffering from cholecystitis is characterized by a statistically significant predomination of men and persons over 60 years of age, however, it is generally typical of COPD in elderly persons as compared with BA. And, just on the contrary, allergy is noted in this group essentially less seldom than in case of asthma, that is quite natural. One should note a great incidence of an isolated course of cholecystitis in case of COPD and a rarity of cases of cholecystitis, “complicating” both BA and COPD.

A difference in the rate of indices between the groups of BA patients in COPD with intestinal pathology is insignificant. However, attention is drawn to a greater number of men >60 years among patients with COPD, a greater rarity of the development in them of intestinal pathology against a background of COPD, as well as cases of cor pulmonale and allergic anamnesis.

Conclusions

Summarizing the findings of an analysis of comparing the basic forms of pathology of the DS in BA and COPD, one should single out consistent patterns: about a dominant of influencing the formation of the clinical picture in patients with DS pathology of lung diseases with the clinical pathogenetic specific characteristics peculiar to them; about a similarity of the basic parameters; about DS pathology itself in patients with pulmonary diseases and about the hierarchy of pathogenetic connections of DS pathology according to the degree of their association with

the fundamental diseases. The individual analysis carried out by us corroborates the general regularities.

Prospects of further studies. An elaboration on the basis of investigations of associated pathology of diseases of the respiratory and digestive systems, a differentiated diagnostic and therapeutic approach of managing these particular patients in the inpatient setting .

References

1. Гембицкий Е.М. Заболевания пищеварительной системы у больных бронхиальной астмой / Е.М.Гембицкий, С.М.Кириллов, А.В.Ломоносов // Клин. мед. – 2000. – № 3. – С. 54-57.
2. Маев И.В. Состояние органов пищеварения при хроническом бронхите, бронхиальной астме и эмфиземе легких / И.В.Маев, Л.П.Воробьева, Г.А.Бугарова // Пульмонология. – 2002. – № 4. – С. 85-91.
3. Христинич Т.Н. К вопросу о патогенезе сочетанных заболеваний органов пищеварения и бронхолегочной системы / Т.Н.Христинич // Укр. терапевт. ж. – 2006. – № 2. – С. 88-91.
4. Rabinovich R.A. Chronic obstructive pulmonary disease and its comorbidities / R.A.Rabinovich, W.MacNee // Br. J. Hosp. Med. (Lond). – 2011. – Vol. 72 (3). – P. 137-145.

СОПОСТАВЛЕНИЕ КЛИНИКО-ДИАГНОСТИЧЕСКОЙ КАРТИНЫ ЧАСТНЫХ ФОРМ ПАТОЛОГИИ ПИЩЕВАРИТЕЛЬНОЙ СИСТЕМЫ ПРИ БРОНХИАЛЬНОЙ АСТМЕ И ХРОНИЧЕСКОЙ ОБСТРУКТИВНОЙ БОЛЕЗНИ ЛЕГКИХ

С.В.Коваленко, А.Э.Дорофеев, М.В.Патратий, Ю.Ф.Марчук

Резюме. В статье обсуждается частота и клинико-диагностическая картина сочетания хронической обструктивной болезни легких (ХОБЛ) и бронхиальной астмы (БА) с сопутствующими заболеваниями пищеварительного тракта. Выделяются основные закономерности сочетанного течения данных заболеваний, подтвержденные частным анализом.

Ключевые слова: хроническая обструктивная болезнь легких, бронхиальная астма, пищеварительная система.

ЗІСТАВЛЕННЯ КЛІНІЧНО-ДІАГНОСТИЧНОЇ КАРТИНИ ОКРЕМИХ ФОРМ ПАТОЛОГІЇ ТРАВНОЇ СИСТЕМИ ПРИ БРОНХІАЛЬНІЙ АСТМІ ТА ХРОНІЧНОМУ ОБСТРУКТИВНОМУ ЗАХВОРЮВАННІ ЛЕГЕНЬ

С.В.Коваленко, А.Е.Дорофеев, М.В.Патратий, Ю.Ф.Марчук

Резюме. У статті наведені дані аналізу частоти та клінічно-діагностичної картини поєданого перебігу хронічного обструктивного захворювання легень (ХОЗЛ) та бронхіальної астми (БА) і основних захворювань органів шлунково-кишкового тракту (ШКТ). Виділені основні закономірності поєданого перебігу ХОЗЛ і БА та захворювань ШКТ, що підтверджуються даним аналізом.

Ключові слова: хронічне обструктивне захворювання легень, бронхіальна астма, травна система.

Буковинський державний медичний університет,
Донецький національний медичний університет

Рецензент – д.мед.н. Л.Д.Тодоріко

Buk. Med. Herald. – 2011. – Vol. 15, № 3 (59). – P. 182-184

Надійшла до редакції 11.07.2011 року