# CLINICAL AND PHARMACOLOGICAL AUDIT OF HEPATOPROTECTORS USED IN TREATMENT OF PATIENTS WITH CHRONIC LIVER DISEASES IN SOME HOSPITALS OF KHOREZM REGION - URGENCH BRANCH OF TASHKENT MEDICAL ACADEMY

## Ismoilov Solay Ruzmamatovich <sup>1</sup>, Bekchanova Yulduzkhon Khayitboyevna <sup>2</sup>, Omonova Gavkhar Sultanovna <sup>3</sup>, Karimova Dilbar Sharipovna <sup>4</sup> and Akhmedova Nazokat Marimbaevna<sup>5</sup>

 <sup>1</sup> Professor, Department of Pharmacology and Clinical Pharmacology, Al-Khorazmiy St 28, Urgench City, Uzbekistan.
<sup>2, 3</sup> Senior Lecturer, Ph. D, Department of Pharmacology and Clinical Pharmacology, Al-Khorazmiy St 28, Urgench City, Uzbekistan.
<sup>4</sup>Senior Lecturer, Department of Pharmacology and Clinical Pharmacology, Al-Khorazmiy St 28, Urgench City, Uzbekistan.
<sup>5</sup>Assistant, Department of Pharmacology and Clinical Pharmacology, Al-Khorazmiy St 28, Urgench City, Uzbekistan.

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## Abstract

Retrospectively, pharmacoepidemiological methods were used to study 360 pieces of the history of diseases of patients with diseases of the hepatobiliary system, treated in the central polyclinic of the city of Urganch and the Khiva district medical association. For the study, the questionnaire included 35 names of hepatoprotectors used in practical medicine in Uzbekistan. It was revealed that pharmacotherapy of patients with hepatobiliary diseases in the central polyclinic of the city of Urganch and Khiva district medical association is adequate for the severity of the pathological process and corresponds to the recommendations recognized by the global community of gastroenterologists. In the treatment of patients with diseases of the hepatobiliary system, physicians used hepatoprotectors separately, as well as in a combined form.

**Keywords:** diseases of the hepatobiliary system, pharmacoepidemyology, hepatoprotectors, clinical pharmacological analysis.

## INTRODUCTION

It is known that the growth rate of chronic liver diseases worldwide has been increasing year by year in recent years, and every year more than a billion people of different ages are suffering from various liver diseases. These diseases have the highest rates of death and disability among the population worldwide [1, 4, 10, 11, 12].

According to the World Health Organization (WHO), the number of people suffering from chronic liver diseases is more than 2 billion, which is 100 times more than the number of AIDS patients. From 500,000 to one million people with liver diseases are registered in CIS countries every year. The incidence of these diseases is increasing, especially among young people, and women are affected 4-7 times more often than men.

Today, these diseases are one of the most urgent problems of modern medicine [2, 3, 8, 13]. The hepatobiliary system is involved in many processes in the body. Its damage leads to metabolic disorders, immune response, detoxification and antimicrobial protection [7, 9, 14, 15]. Liver cells are quickly damaged by aggressive agents - poisons, free radicals, bacteria and viruses.

The origin of these diseases lies in oxidative stress in hepatocytes as a result of hormonal and metabolic disturbances, poor quality food products, excessive consumption of alcohol and drugs. In the treatment of chronic liver diseases, along with other drugs, hepatoprotectors from a large arsenal are widely used. However, their effectiveness and harmlessness have not been studied using pharmacoepidemiological methods.

Therefore, in this work, the effectiveness, safety, prospects of their use, and the pharmacoeconomic basis of treatment were studied among the patients treated in the central polyclinic of Urgench city of Khorezm region and the medical association of Khiva district by pharmacoepidemiological methods.

# MATERIALS AND METHODS

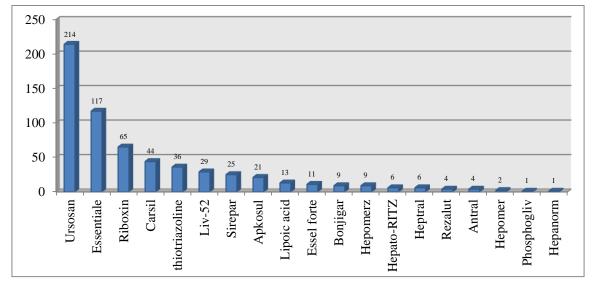
The medical history of 360 patients treated with chronic liver diseases in some medical associations in the Khorezm region was studied retrospectively (from 2005 to 2015) using pharmacoepidemiological methods (by collecting questionnaire data from the medical history) [5, 6, 7]. 36 drugs used in practical medicine in Uzbekistan were included in the questionnaire. In the ongoing therapy, great attention was paid to the combined use of hepatoprotectors, their effectiveness and safety. All data were statistically analyzed based on Student's criteria.

# **RESULTS AND DISCUSSION**

According to the received data, 106 of 360 patients were men (29%) and 254 were women (71%). 145 of them (40%) live in cities and 215 (60%) live in villages. Among these patients, 166 (46%) had chronic hepatitis and hepatocholecystitis, 128 (36%) had liver cirrhosis and transition of chronic hepatitis to cirrhosis, and the remaining 65 (18%) patients had chronic cholecystitis. Hepatoprotectors were recommended to all patients as the main treatment, individually or in combination with each other.

Pain relievers, antispasmodics, anti-inflammatory agents, glucocorticosteroids, immunostatics, etc. were recommended as additional treatment. 19 types of hepatoprotectors from the main group of drugs were recommended to all patients in various combinations or individually (picture).

Essentiale with Ursosan were used in 55.3% of patients, of which Ursosan was used in 34.6% (in 214 patients) and Essentiale in 18.9% (in 117 patients). If we consider these drugs by diseases, the following picture emerges: 69 (20.4%) patients with ursosan hepatitis, 96 (52.1%) patients with liver cirrhosis and 49 (51.6%) patients with cholecystitis was used in 83 (24.5%) patients with essential hepatitis, 21 (11.4%) patients with liver cirrhosis, and 13 (13.7%) patients with cholecystitis (Table).



Picture 1: Frequency of usage of hepatoprotectors in patients

Carsil with riboxin were used in more than 17% of patients, of which riboxin was used in 10.5% (in 65 patients) and carcil in 7.2% (in 44 patients). If we consider these drugs by diseases, the following picture emerges: riboxin was used in 50 (14.7%) patients with hepatitis, 10 (5.4%) patients with liver cirrhosis, and 5 (5.3%) patients with cholecystitis. whereas, carcil was appropriately used in 33 (9.8%), 6 (3.3%) and 5 (5.3%) patients.

| Table 1: The proportion of hepatoprotectors used in various diseases of the |
|---|
| hepatobiliary system by disease   |

| № т/р | Drug name     | In liver<br>cirrhosis | In hepatitis | In cholecystitis | Overall | Proportion |
|-------|---------------|-----------------------|--------------|------------------|---------|------------|
| 1     | Ursosan       | 96                    | 69           | 49               | 214     | 34,6       |
| 2     | Essentiale    | 21                    | 83           | 13               | 117     | 18,9       |
| 3     | Riboxin       | 10                    | 50           | 5                | 65      | 10,5       |
| 4     | Carsil        | 6                     | 33           | 5                | 44      | 7,2        |
| 5     | Thiotrazoline | 24                    | 9            | 3                | 36      | 5,8        |
| 6     | Liv-52        | 2                     | 22           | 5                | 29      | 4,7        |
| 7     | Sirepar       | 4                     | 14           | 7                | 25      | 4,1        |
| 8     | Apkosul       | -                     | 18           | 3                | 21      | 3,4        |
| 9     | Lipoic acid   | 3                     | 9            | 1                | 13      | 2,1        |
| 10    | Hepato-RITZ   | 6                     | -            | -                | 6       | 3,4        |
| 11    | Essel forte   | -                     | 10           | 1                | 11      | 1,8        |
| 12    | Bonjigar      | -                     | 9            | -                | 9       | 1,6        |
| 13    | Hepamerz      | 5                     | 3            | 1                | 9       | 1,6        |
| 14    | Heptral       | 4                     | 2            | -                | 6       | 1,0        |
| 15    | Rezalut       | 1                     | 3            | -                | 4       | 0,6        |
| 16    | Antral        | 2                     | 1            | 1                | 4       | 0,6        |
| 17    | Hepamer       | -                     | 2            | -                | 2       | 0,3        |
| 18    | Phosphigliv   | -                     | 1            | -                | 1       | 0,1        |
| 19    | Hepanorm      | -                     | -            | 1                | 1       | 0,1        |
|       | Overall:      | 184                   | 338          | 95               | 617     | 100        |

Thiotriazoline and liv-52 drugs were used in more than 10% of patients, of which thiotriazoline accounted for 5.8% (in 36 patients) and liv-52 in 4.7% (in 29 patients). If we consider these drugs by diseases, it is as follows: thiotriazoline was used in 9 (2.7%) patients with hepatitis, 24 (13%) with liver cirrhosis and 3 (3.2%) with

cholecystitis, Liv-52 hepatitis It was used in 22 (6.5%) patients with liver cirrhosis, 2 (1.1%) patients with cholecystitis, and 5 (5.3%) patients with cholecystitis.

Sirepar and Apkosul were used in 7.5% of patients, of which Sirepar was used in 4.1% (25 patients) and Apkosul in 3.4% (21 patients). If we consider these drugs by diseases, it is as follows: Sirepar was used in 14 (4.1%) patients with hepatitis, 4 (2.1%) with liver cirrhosis and 7 (7.3%) with cholecystitis, while Apkosul hepatitis It was used in 18 (5.3%) patients with cholecystitis and 3 (3.2%) patients with cholecystitis, but these hepatoprotectors were not used in patients with liver cirrhosis.

A total of 617 hepatoprotectors were used, 184 of which were used for 128 patients with liver cirrhosis, 338 for 166 patients with hepatitis, and 95 for 65 patients with cholecystitis. This corresponds to an average of 1.7 drugs per patient. However, 1.5 per patient with liver cirrhosis, hepatitis and cholecystitis, respectively; 2 and 1.5 indicate that the drug is correct. In addition, in some patients, 1 or 2 hepatoprotectors were used at the same time, and in some, 3 or 4 drugs were used. The remaining 19 of the 36 studied hepatoprotectors were not used at all during the treatment of patients in outpatients. Despite this, doctors have achieved good results in the treatment of the disease.

Based on the above results, it is possible to treat patients with chronic liver diseases in the Khorezm region with the above-mentioned 19 drugs.

# CONCLUSION

- 1. Among patients with chronic liver diseases in Khorezm region, the first place is chronic hepatitis and hepatocholecystitis, the second place is liver cirrhosis and transition of chronic hepatitis to liver cirrhosis, the last place is chronic cholecystitis.
- 2. In the treatment of chronic liver diseases, doctors used hepatoprotectors individually and in various combinations with each other.
- 3. 19 types of hepatoprotectors were used in patients with chronic liver diseases in inpatients of Khorezm region.

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