And 66.7% of the patients using **B-B** for treatment of( IHD) and according to (ESC) Guidelines for the management of acute myocardial infarction (highly effective in preventing CV events in patients with a recent myocardial infarction and those with heart failure). Early intravenous **B-B** administration, In patients undergoing fibrinolysis, early intravenous (i.v.) beta-blocker treatment reduces the incidence of acute malignant ventricular arrhythmias and i.v. beta-blockers at the time of presentation followed by oral **B-B** should be considered in haemodynamically stable patients undergoing primary Percutaneous Coronary intervention (PCI). Mid- and long-term **B-B** treatment recommended in patients with reduced systolic Left ventricular(LV) function.

**Table 3**

**Cause of use b-blockers**

| EH | EH+ CHF | EH+IHD | EH+CHF+ IHD |
|---|---|---|---|
| 22.2% | 48.2% | 66.7% | 37% |

About 44.5% of patients have used **B-B** with Diabetes mellitus. Beta-blockers are the one of the major class of blood-pressure-lowering drugs that have been implicated in causing diabetes or worsening diabetes control. Beta2-receptors appear to play an important role in the stimulated hepatic glucose production in humans. And according to Hypertension guidelines from the JNC 8 **B-B** are not recommended in patients with Diabetes mellitus (even as third-line).

**Conclusions:**

- 54% of patients use b-Blockers, among investigated case histories;
- 85% of them use Bisoprolol as monotherapy or in combination;
- 22% use b-blockers for treatment of hypertension;
- 48.2% of patients use b-blockers for treatment of heart failure which is according to internationals guidelines;
- 66.7% of patients use b-blockers for treatment of IHD which is according to international guidelines;
- 44.5% of patients use b-Blockers with comorbidities of Diabetes mellitus, which is not recommended and should be used with caution and strict medical supervision.

## CLINICAL USE OF ANGIOTENSIN-CONVERTING ENZYME INHIBITORS

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**Introduction.** Angiotensin-converting enzyme inhibitors (ACEIs) have been used for the therapy of cardiovascular diseases, as they are effective, life-saving medicines with more than 20 years of widespread safe use.

ACEIs play an important role in hypertension and heart failure management, both alone and in various combinations with other pharmacological agents from different classes.

Besides being effective and safe in blood pressure control, ACEIs also substantially reduce cardiovascular risk, incidence of fatal and non-fatal heart attacks, strokes, and kidney failure; they also improve quality of life.

**Aim.**

- To estimate the frequency of different causes for ACEIs use.
- To estimate the most widely used ACEIs.
- To study what drugs are ACEIs most commonly combined with.
- To analyse if ACEIs are used according to the international guidelines.

**Materials and methods.** We analysed case histories of 50 cardiological patients hospitalized in therapeutic department during one month.

**Results and discussion.** Table 1 shows that the most common cause of ACEI administration was the combination of heart failure, ischemic heart disease, and essential hypertension. This diagnosis

accounted for 50% of all cases. The patients with hypertension and combination of hypertension and heart failure accounted for 20.8% each, and with hypertension and ischemic heart disease for 8.3%.

Table 1

Causes of use of ACEIs

| Hypertension | Hypertension + Heart Failure | Hypertension + Ischemic Heart Disease | Hypertension + Heart Failure + Ischemic Heart Disease |
|---|---|---|---|
| 5 | 5 | 2 | 12 |

Table 2 shows that 62.5% of the patients used perindopril, 20.8% used lisinopril, and 8.3% used Ramipril and captopril each. Therefore, the most common ACEI was perindopril.

Table 2

Most widely used ACEIs

| Perindopril | Lisinopril | Ramipril | Captopril |
|---|---|---|---|
| 15 | 5 | 2 | 2 |

Table shows 3 that ACEIs were predominantly used in combinations with other pharmacological substances. In 16.7% of cases, ACEIs were combined with angiotensin II receptor blockers, which is a potentially dangerous combination due to higher risk of hyperkalaemia.

Table 3

ACEIs combinations

| Only ACEI | ACEI+ b-blocker + Diuretic | ACEI + b-blocker + Diuretic + Calcium channel blocker | ACEI + B-blocker | ACEI + Calcium channel blocker | ACEI + Diuretic | ACEI + Angiotensin II receptor blocker |
|---|---|---|---|---|---|---|
| 3 | 6 | 4 | 2 | 3 | 2 | 4 |

**Conclusions**.

1. The most common diagnosis for ACEI use was Hypertension + Heart Failure + Ischemic Heart Disease – 50% of all cases.
2. 62.5% of all patients used perindopril.
3. In 87.5% of cases, ACEI was used in combination with other drugs.
4. In most cases, the use of ACEIs was according to the international guidelines, but in 16.7% of cases, there were potentially harmful combinations.

## RESEARCH ON THE EFFECT OF MEDICINAL PRODUCTS ON HUMAN HEMATOLOGICAL INDICATORS

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**Introduction.** The main aim of pharmacy and medicine is to provide quality and skilled assistance to the population and thereby improve the quality of life of Ukrainians. Therefore, the problem of providing effective and safe pharmacotherapy is becoming more and more relevant. For the treatment of diseases widely used drugs that exhibit certain pharmacological activity, unfortunately almost all drugs also cause certain side effects.

One of the most common adverse reactions to medicinal products on the human body is the damage to the system of hematopoiesis. Changes from the blood side are among the most common side effects of drugs.

**Aim.** The purpose of the work was to study the effects of drugs on the indicators of the general analysis of blood.