

# EVALUATION OF THE RATIONALITY OF PERIOPERATIVE ANTIBIOTIC PROPHYLAXIS

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## Introduction

Irrational perioperative antibacterial prophylaxis increases microbial resistance, treatment cost, and length of hospital stay.

## Keywords

Perioperative, prophylaxis, antibacterial

## Purpose

Evaluation of the rationality of perioperative antibiotic prophylaxis by assessing the time of administration of antibacterial drugs and the duration of their use.

## Material and methods

In 5 surgical departments, 100 patients were evaluated for the time of administration of the antibiotic relatively to the time of incision and the duration of their prophylactic use.

## Results

The antibacterial drug was administered 1-2 hours before the skin incision in 39 patients, one hour - in 25, and after the incision - in 36 patients. Duration of prophylactic use of antibiotics in 12 patients - up to 24 hours, in 88 - over 24 hours.

**Table 1. Distribution of patients to the time of initiation of antibiotic prophylaxis.**

Surgical department	Time of initiation antibacterial prophylaxis			Total number
	120-60 min before skin incision	< 60 min before skin incision	After skin incision	
Cardiac surgery of acquired defects	0	20	0	20
Colorectal surgery	16	3	1	20
Hepatobiliopancreatic surgery	4	1	15	20
Urology	14	1	5	20
General surgery	5	0	15	20
<b>Total number</b>	<b>39</b>	<b>25</b>	<b>36</b>	<b>100</b>

**Table 2. Distribution of patients according to the duration of antibacterial drug administration**

Surgical department	Duration of prophylactic administration of the antibacterial drug		Total number
	< 24 hours	> 24 hours	
Cardiac surgery of acquired defects	0	20	20
Colorectal surgery	1	19	20
Hepatobiliopancreatic surgery	3	17	20
Urology	3	17	20
General surgery	5	15	20
<b>Total number</b>	<b>12</b>	<b>88</b>	<b>100</b>

## Conclusions

Perioperative antibiotic prophylaxis is largely irrational, which was manifested by the administration of the antibiotic after the incision, as well as by the duration of administration over 24 hours.