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## BACKGROUND:

An interdisciplinary working group developed a standardized perioperative antibiotic prophylaxis (AP) protocol. In 2014, in the first post-intervention evaluation, we observed that 26.8% of the surgeries non-compliance with protocol (43.75% of them were cardiac surgeries)

## PURPOSE:

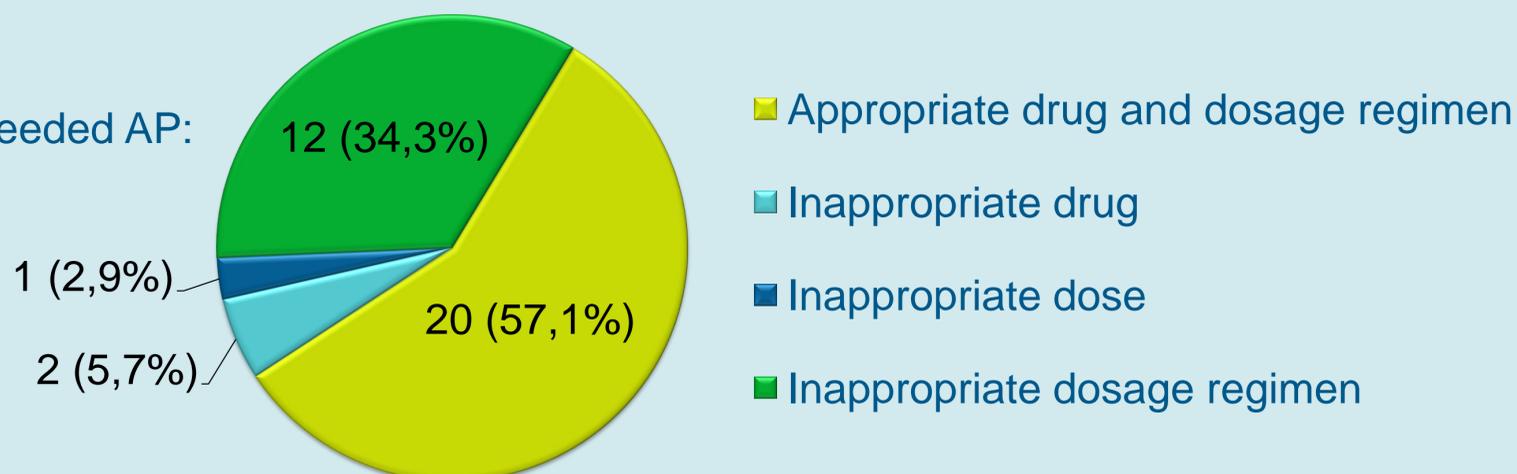
To evaluate compliance with selected process measures for perioperative AP in patients undergoing a cardiac surgery.

## MATERIAL AND METHODS:

The prospective study included all cardiac procedures performed on adult patients during a two weeks period (6-17 February 2017). Compliance with process measures was: correct antibiotic selection (appropriate drug, dosage regimen), dose timing (30 minutes before surgical incision), parenteral AP dose recorded in clinical history (CH), intraoperative AP dose recorded in more than 3 hours prolonged surgeries and discontinuation of perioperative AP.

## RESULTS:

**35** cardiac procedures needed AP:



- Antibiotic dose administration was registered in electronic CH in 34 cases (97.1%), however one case wasn't registered in surgical sheet.
- Antibiotic dose timing was registered in CH in 32 cases (91.4%), but it wasn't registered in surgical sheet in all the cases. It was observed that dose timing was incorrect in 10 patients (28.6%) (AP was administered less than 30 minutes before the beginning of the surgical procedure in nine cases and it was administered later in one case).
- The surgery lasted more than three hours in 18 cases. A second intraoperative antibiotic dose was used and registered in all cases.
- All patients discontinued AP within 48 hours after the end of the surgery.

## CONCLUSIONS:

A high compliance with the process measures is observed in the dosage registration and discontinuation of perioperative AP, meanwhile a poor compliance in the correct selection of AP (dosage regimen) and dose timing are noticed.

It's necessary an intervention to improve non-compliance rates; some corrective measures are proposed such as remembering the importance of administering the first dose of antibiotic 30 minutes before surgical incision, using the dosage regimen according to the surgical procedure and registering AP on the surgical sheet.