

IMPLEMENTATION OF A SEQUENTIAL ANTIBIOTIC THERAPY PROGRAMME IN A THIRD-LEVEL HOSPITAL

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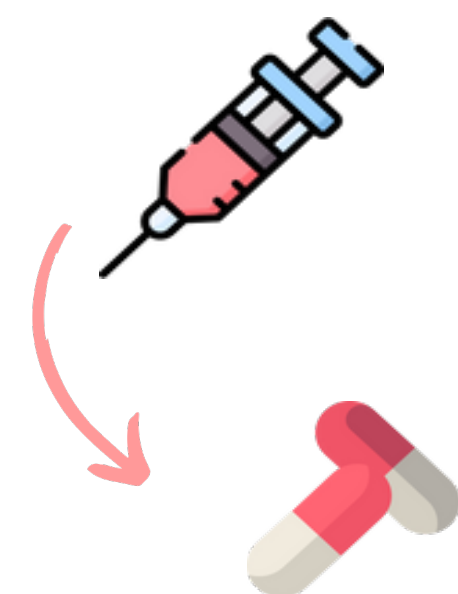
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WHAT WAS DONE?

✓ Implementation of a programme of **antibiotic sequential therapy (AST)** and evaluate the outcome of the pharmaceutical recommendations carried out in a third-level hospital.

WHY WAS IT DONE?

SEQUENTIAL THERAPY, or SWITCH THERAPY, consists of an early **conversion from intravenous to oral** treatment.



Advantages

- ✓ = therapeutic effectiveness
- ✓ ↓ intravenous associated risks
- ✓ ↑ comfortable to patients
- ✓ ↑ economic saving



The aim of the GPI was to **implement a daily programme** that allows the pharmacist to **identify the patients** that would benefit from the AST.

HOW WAS IT DONE?

1

A **database** was created to select the active **antibiotic** prescriptions with more than **72 hours duration**, susceptible to AST.



- metronidazole
- clindamycin
- levofloxacin
- ciprofloxacin
- linezolid

2

Patients **clinical criteria** for initiating AST were established as:



- Temp ≤ 37 °C
- SBP ≥ 90 mmHg
- HR < 100 bpm
- RR < 24 rpm
- O₂ sat ≥ 90%
- Capacity for oral intake

3

Once the patients were identified, the pharmacist communicated the **recommendation** to the doctor and worked together to make a final decision.



WHAT HAS BEEN ACHIEVED?



453 PATIENTS



47 were selected as they met the established criteria

Antibiotics recommendation/acceptance relation

ANTIBIOTIC	PATIENTS	% RECOMMENDATION	% ACCEPTANCE
CIPROFLOXACIN	119	14 (11,76%)	9 (64,28%)
CLINDAMICIN	106	10 (9,43%)	6 (60%)
LEVOFLOXACIN	121	9 (7,43%)	4 (44,44%)
LINEZOLID	101	6 (5,94%)	5 (83,33%)
METRONIDAZOLE	66	8 (12,12%)	4 (50%)
TOTAL	453	47 (10,37%)	28 (59,67%)

Infections recommendation/acceptance relation

INFECTION	PATIENTS	% RECOMMENDATION	% ACCEPTANCE
Lower Respiratory Inf	215	11 (5,11%)	3 (27,27%)
Intra-abdominal Inf	94	8 (8,51%)	5 (62,50%)
UTI	64	13 (20,31%)	8 (61,53%)
Skin and soft parts Inf	42	6 (14,28%)	5 (83,33%)
Prophylaxis for immunosuppressed patients	29	4 (13,79%)	2 (50%)
Bacteremia	25	1 (4%)	1 (100%)
Others	45	3 (18,75%)	3 (100%)
TOTAL	416	46 (11%)	23 (50%)

WHAT IS NEXT?

The **high number of accepted recommendations** shows the importance of implementing an AST programme in order to **optimize the antimicrobial treatment**, and this initiative **could be easily implemented to all Pharmacy Services**.

