

Selective Digestive Decontamination uses in French hospitals in 2018

Poster number: DI 002

Jean-Meidi ALILI, Riana RASAMISON, Marie-Pierre BERLEUR, Marie-Caroline HUSSON

Regulatory, Pharmaceutical and Medical Department, Pharmaceutical Establishment of Paris Hospitals Group, AP-HP, Paris, France
jean-meidi.alili@aphp.fr ; marie-caroline.husson@aphp.fr

Background and Objective

- Selective Digestive Decontamination (**SDD**) is used to prevent or eradicate intestinal carriage of potentially pathogenic aerobic Gram-negative bacteria
- Since 2010, our establishment has been manufacturing a combination of colistin and gentamicin in capsules for SDD (**COLI-GENTA**)
 - with 2 dosages: 27 mg/50 mg for children and 135 mg/100 mg for adults
 - with a status of hospital preparation

Aim of the study

=
to re-evaluate the usefulness of
COLI-GENTA for SDD
in French hospitals

Setting and Method

Survey: Nov. 2017-March 2018
in **58 French hospitals**
customers of COLI-GENTA from 2014 to 2017

Pharmacists

Clinicians

Intensive Care Units (ICU)
Gastroenterology
Hæmatology

Main outcome measures

Indication ?

Standardized questionnaire

Posology ?

Patient profile ?

Results

- Thirty French hospitals (n= 30/58) answered the questionnaire: **30 pharmacists + 8 clinicians**

Patient profile and indications

ICU

- transplantation
- bloodstream infection
- polytrauma
- serious burns

Gastroenterology

- colorectal surgery
- bacterial multiplication

Hæmatology

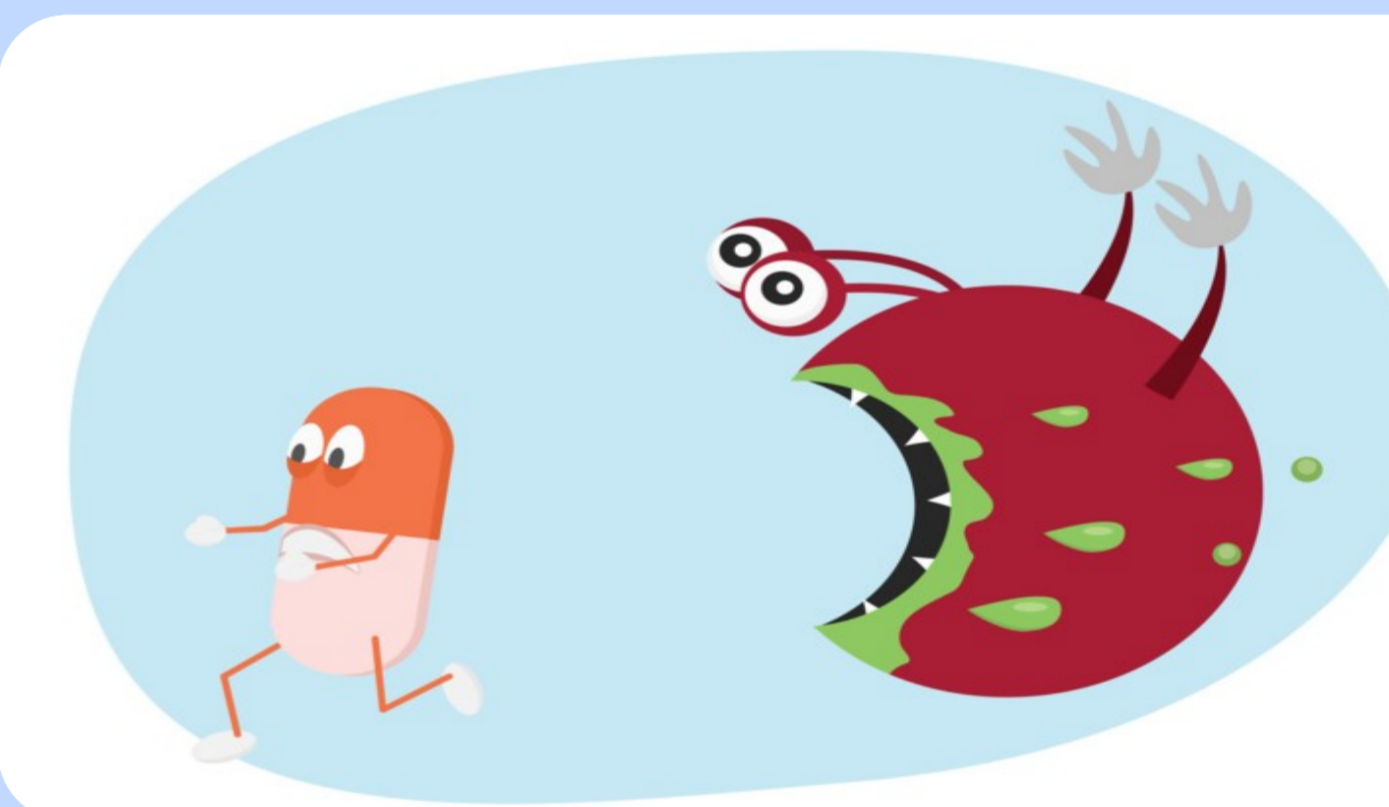
- transplantation
- neutropenia

Posology

4 capsules/day
→ 3-4 weeks1-4 capsule(s)/day
→ 1 day to several weeks3-8 capsules/day
→ several weeks

Antimicrobial resistance

Eleven hospitals (n=11/30)
stopped SDD use due to
antimicrobial resistance (**AMR**) issues



Discussion

- SDD clinical studies: great variability of protocols, differences in ecological environments, biases in methodology
→ **SDD study results are difficult to appraise and compare**

- United Nations: "AMR is a threat to global health"¹

- Concerning colistin-gentamicin:

"Colistin and gentamicin are
essential medicines"²"In some cases, colistin is the
last resort treatment"²"AMR to colistin is a
serious warning"³"In high levels of AMR countries,
colistin is among the only few
therapeutic options available"³

- In 2017, several French anaesthesia and intensive care societies decided to recommend the use of SDD in the areas where the prevalence of multidrug-resistant bacteria is low⁴.

In total: is SDD use still relevant in 2018 ?

- yes, in some patients, depending on the ecological environment
- yes, if AMR rate is closely monitored

SDD in practice

PROs

decrease of ventilator-
associated pneumonia in
ICU patients⁵beneficial effects in burn
patients⁶beneficial effects in rare
intestinal diseases⁷

CONS

long-term ecological
consequences
are unknown
→ AMR ? ⁸

SDD

Conclusion

- To assess the usefulness of COLI-GENTA for SDD, it is necessary to take into account:
 - the diversity of drug combinations currently used for SDD in hospitals
 - the results of clinical studies
 - the potential epidemiological consequences of SDD use (→ AMR ?)
- According to this survey and to clinical experience, **COLI-GENTA could remain suitable, after considering the ecological context:**
 - in **ICU** to prevent ventilator-associated pneumonia
 - in **hæmatology** in seriously ill patients
 - in **gastroenterology** in rare paediatric disorders