ANALYSIS OF ORAL MEDICATION PRESCRIPTION AND ADMINISTRATION THROUGH THE JEJUNOSTOMY OR THE NASOGASTRIC TUBE IN AN INTENSIVE CARE UNIT: HOW TO IMPROVE PATIENT’S HOSPITALISATION?

M. Cabaret-Loux, J 1 Perreux 1, P. Cavagna 1, C. Fernandez 1, T. Lescot 2, S. Bizet 2, M. Antignac 1
1 Department of pharmacy 2 Surgical Intensive Care Unit – Department of Anesthesiology and Critical Care Medicine
St Antoine hospital, HUEP, AP-HP, France

23rd EAHP Congress
Gothenburg, Sweden, 21-23 March 2018

Background
In intensive care unit (ICU), patients are frequently unable to take oral tablet and capsule due to invasive ventilation or sedation. Therefore medications are administered by nasogastric tube or jejunostomy. Moreover, it is to be expected that massive resection of the gastrointestinal tract will have consequences on the absorption of orally administered medication. Few data or guidelines were available to help physicians and nurses to prescribe and administer drugs to these patients.

Objectives
To assess prescriptions and administrations of oral medications through the jejunostomy or the nasogastric tube in surgical ICU.

Methods
We conducted
• a prospective descriptive study
• between January and February 2017
• among patients with stomy, or nasogastric tube and oral medications prescriptions.

• Medical data (type of surgical resection ..),
• Prescription data : drugs..
• Administration data : modalities of preparation and administration

Were collected
• in medical files and
• by nurses interviews by a clinical pharmacist student.

Results
Overall 283 medications were studied for patients presenting an enteral feeding tube or a jejunostomy. Finally, nurses were interrogated about their administration practices for 82 medications to describe the usual process.

1 Prescription
• 283 prescribed drugs
• By 11 physicians (4 seniors and 7 residents)
• 18.3 % (52/283) of the oral medications were prescribed without indications about specific administration routes (stomy, nasogastric tube or other) when it was necessary and considerations for the digestive resection (Figure).
• Modalities of drugs preparation (solvent…) were never prescribed.

2 Regarding administration habits are very different according to nurses,
• medications were mainly solved before administration (99%,n=81/82) into
  • Sodium bicarbonate 1.4% (46.9%, n=38/81)
  • Tap water (33.33% n=27/81)
  • Sodium chloride 0.9% n=1/81)
• Within those medications, 39% (32/82) were simultaneously administered in the same syringe

Potential physico-chemical interaction,
• Produce toxic metabolites or
• Induce reduced efficiency.

After analysis, 69.5% (n=57/82) of drugs administrations were deemed to be of poor conformity

Discussion / Conclusion
This study highlights the importance of clear guidelines.

1 After the survey, pharmacists team purpose prescription and administration guidelines.
2 Hence, a pharmacist analyses orders, gives advices via a new individual summary sheet completed according to the patient gastro-intestinal tract resection, the possibility to mash the tablet or open the capsule and available alternatives.