

# PLACE OF CLINICAL PHARMACIST IN THE MANAGEMENT OF PATIENTS UNDERGOING BARIATRIC SURGERY

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## Background

Obesity is a major Public Health concern in France. One epidemiologic study (ObEpi, 2012¹) showed a national prevalence of 15 %, with a average Body Mass Index of 25,2 kg per m<sup>2</sup>. The World Health Organization defines it as a serious chronic disease responsible from severe complications. Taking into account these complications (diabetes, hypertension, respiratory and cardiovascular complications, dyslipidemia), multiple specialists and medication history sources are involved in obesity management. For morbid obesity, bariatric surgery can be proposed by Sleeve gastrectomy (restrictive procedure) or Gastric By Pass (malabsorptive procedure).

### Objectives

In the framework of clinical pharmacy activity in the digestive surgery ward in collaboration with the CERON (Centre d'Etude et de Recherche sur l'Obesité de Nice Côte d'Azur - Study and Research Center in Obesity of Nice Côte d'Azur), our department of Clinical Pharmacy decided to develop a pharmaceutical healthcare pathway in bariatric

- 1) Defining the place of the clinical pharmacist in the general healthcare pathway for inpatient and outpatient
- 2) Evaluating relevance of medication reconciliation in this type of surgery

### Material and Methods

The healthcare pathway for patients undergoing bariatric surgery was formalized in collaboration with interdisciplinary workgroup. Evaluation of relevance and efficiency of medication reconciliation was based on issues and discrepancies between admission medication and reconciled updated discharge medication.

#### Healthcare pathway of patients – place of pharmacist

Initial information meetings for patients

Organizer nurse

Dietitian

Psychologist

surgery, consisted in:



The clinical pharmacist was integrated in initial information meetings for patients.

- Establishing contact with patients
- Answering questions from patients about their Medecine
- Collecting prescriptions in order to analyse them and contact specialists, general practitioners and community pharmacists.

Surgical Program

Medical Secretary



The pharmacist received the surgical program and planned admission reconciliation on day-1 before surgery. Study details

**Duration of study:** 3 months (June  $\rightarrow$  August 2018).

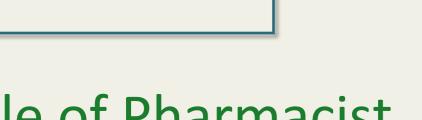
Inclusion criteria: Patient admitted in the digestive surgery ward for bariatric surgery with a BMI >35.

**Ward:** Digestive surgery.

#### **Medication conciliation:**

- Identify intended and unintended medication discrepancies
- Check if pharmaceutical form of medicine are adapted to the regimen based on crushed food: tablets that can be crushed, capsule that can be opened. Recommendations: SFPC list: http://geriatrie.sfpc.eu/
- Unauthorized treatments (Non-Steroidal Anti-Inflammatory) Drugs - NSAI, effervescent tablets), vitamins and supplements.
- Proposition of other formulation or therapeutic alternatives in case of non-crushable tablets or non-openable capsules.

Hospitalization Surgical intervention Sleeve Gastric Gastrectomy le of Pharmacist



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Admission reconciliation at day -1.

Following surgery:



D +48h / +72h

D-1

- Discussion with the patient about the post-operative treatment (i.e. vitamin supplementation)
- Presenting instructions (i.e. crushing) tablets during 45 days, contraindication for NSAI and effervescent tablets).s

Patient Discharge 



The pharmacist give to the patient an informative leaflet for his community pharmacist



A mail was sent to the general practitioner giving details of the discharge medication reconciliation and proposing medication alternative for non-crushing tablets.

#### Results

#### Study population

Number of eligible patients for bariatric surgery: 52 patients

Average age = 44,21 years [ 16 - 66 ]

Gender: Male: N=14  $\rightarrow$  27,5% Female: N=37  $\rightarrow$  72,5%

Type of surgical procedures: Sleeve Gastrectomy (57%) Gastric By Pass (39%), revision or conversion (3,9%)

Most frequent medical history: Obstructive Sleep Apnea Syndrome (30%), Hypertension (23%), Diabetes (20 %), Asthma (17%), gastroesophageal reflux disease (17%)...

Hospital duration stay: 3-4 days

#### Medication Conciliation - Results

98% of patients had medication reconciliation. 2% left due to lack of availability of pharmacists.

#### Reported discrepancies

- Patients with at least one discrepancy: 17/51 -> 33,3 %.
- Total number of reported discrepancies: 47
- 72,3 % (32/47) of discrepancies were unintended (32/47) with 48.9 % (21/32) of omitted medication and 31.2% (10/32) dosage error.
- Antidepressive (52%) and Antihypertensive drugs were the most concerned in unintented discrepancies.
- All of the patients received instructions for post-operative treatment.

#### Discussion - Conclusion

Integrating clinical pharmacy for patients undergoing bariatric surgery is relevant with a gain in care management both for inpatients and outpatients. Implementing this program is possible with a knowledge of the Healthcare pathway that is characterized by a short duration stay in hospital. This activity fits with national/regional indicators referring to Healthcare pathway for obesity and policy of our University Hospital to develop Ambulatory surgery.

