

FIRST CLINICAL RESULTS OF A NEW SILVER-COATED PROSTHESIS IN CLEAN-CONTAMINATED INCISIONAL
HERNIA

Carles OLONA; Aleidis CARO, Cristina FARRES, Jordi VADILLO, Alvaro DIAZ, Marta RODRIGO, Rosa JORBA

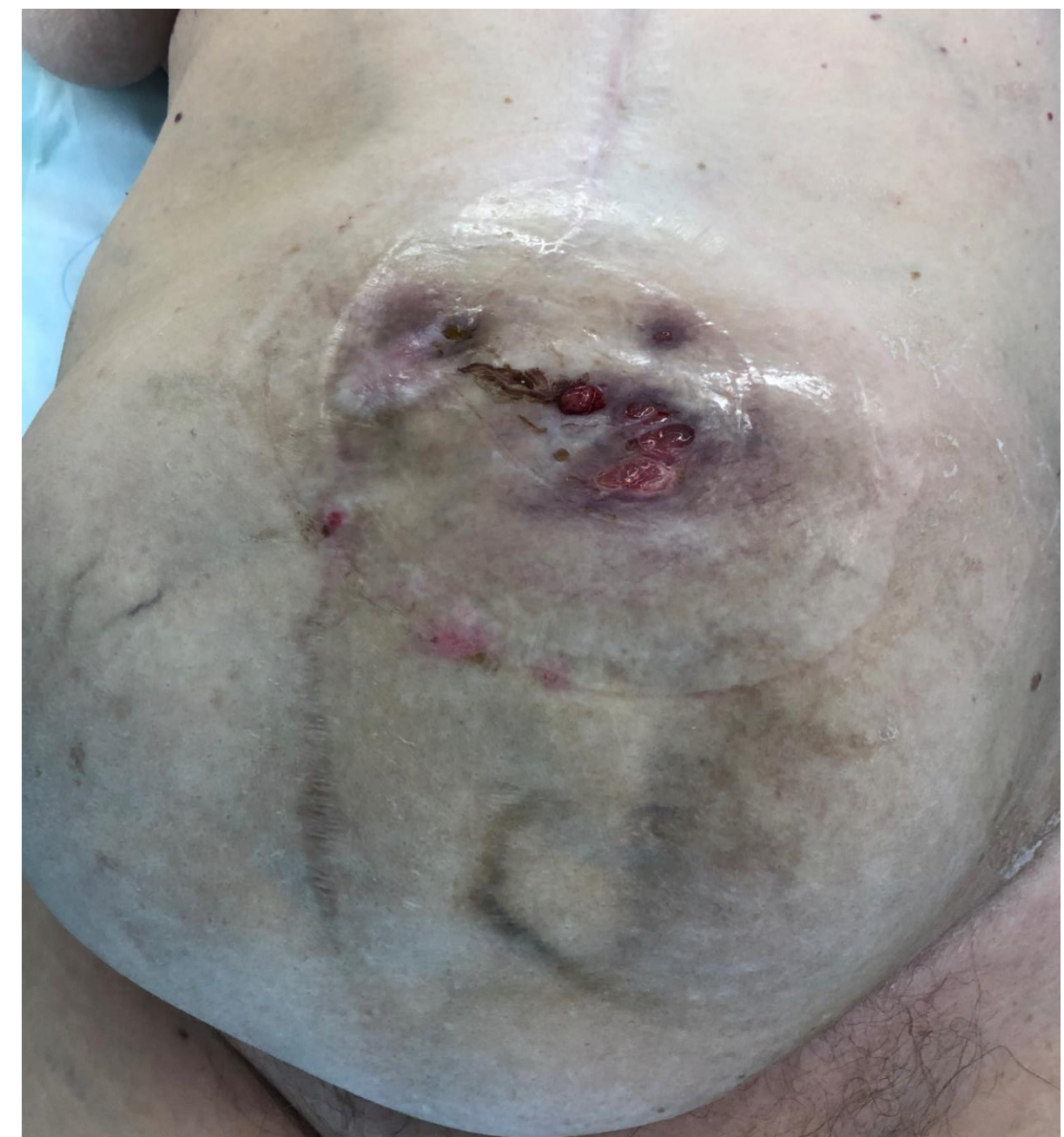
General and Digestive Surgery Department

Hospital Universitari Joan XXIII de Tarragona, Spain



Aim
The incidence of surgical site infection (SSI) in incisional hernia surgery may vary from 10% to 33% in clean-contaminated fields.
Although wide-pore polypropylene prostheses are described as being able to resist infection, they are not exempt from morbidity that can lead to a catastrophic scenario associated with high recurrence.
To avoid these complications, there are new polypropylene prostheses embedded with silver ions with bactericidal effects. We present the first experience described with the use of this type of prosthesis in incisional hernia surgery in clean-contaminated fields.

Material & Methods
Single-center, retrospective, observational study on a prospectively collected sample of patients undergoing incisional hernia surgery in clean-contaminated fields. All of them were operated on simultaneously. Once the resection and/or reconstruction of the intestinal tract was performed, the incisional hernia surgery was performed using a polypropylene prosthesis impregnated with silver ions.
Demographic data, hernia characteristics, surgical technique and follow-up data are collected

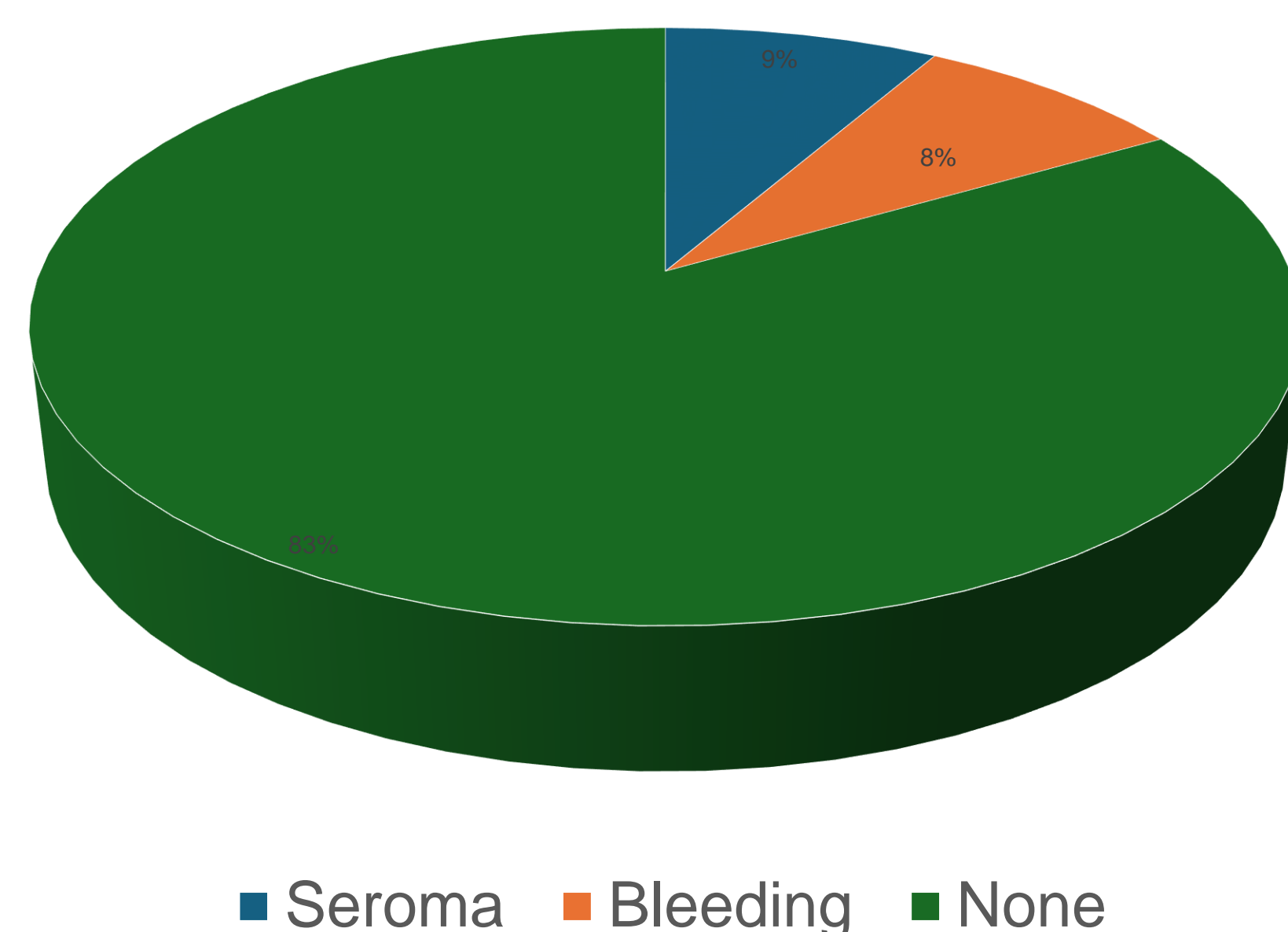


Patient Characteristics	N=12
Gender; male	6 (50%)
Age	60.3 (10.8)
BMI (Kg/m ²)	30.2 (4.1)
Diabetes Mellitus; yes	1 (8.3%)
Hypertension; yes	7 (58.3%)
COPD; yes	2 (16.6%)
Malignant neoplasm, yes	8 (66.6%)
Inflammatory bowel disease; yes	1 (8.3%)
Active smoker; yes	5 (41.6%)
Prior hernia surgery; yes	3 (25%)
ASA classification	
I	1 (8.3%)
II	3 (25.0%)
III	8 (66.6%)

Hernia Characteristics	N=12
Hernia width	7.2 (3-16)
Hernia length	11.8 (5-20)
Reducibility	
Reucible	4 (33.3%)
Partially	6 (50%)
No	2 (16.6%)
Non-parastomal	7 (58.3%)
Parastomal	5 (41.6%)
Colostomy	4 (33.3%)
Ileostomy	1 (8.3%)
Recurrent; yes	2 (16.6%)
Botulinum Toxin; yes	2 (16.6%)

Operative Characteristics	N=12
Elective surgery	10 (83.3%)
Operative time (min)	117.4 (56.5)
Wound classification CDC II	12 (100%)
Concomitatnt procedure	
No	6 (50%)
Small intestinal	2 (16.6%)
Colon	2 (16.6%)
Panniculectomy	1 (8.3%)
Adhesiolisis	1 (8.3%)
Component Separation; yes	6 (50%)
Anterior	1 (8.3%)
Posterior	5 (41.6%)
Mesh width (cm)	19,3
Mesh length (cm)	20 (13-30)
Mesh position	
Onlay	2 (16.6%)
Retromuscular	10(83.3%)
Fascial closure achieved; yes	12 (100%)

30 days follow-up morbidity



Conclusions
The use of silver-impregnated polypropylene prostheses may be a safe alternative for use in clean-contaminated fields, reducing SSI