AU19 BARCELONA 15-19 March 2019

RANDOMIZED CLINICAL TRIAL ON URINARY PH MONITORING AND NUTRACEUTICAL INTERVENTION IN THE PREVENTION OF URETERAL STENT CALCIFICATION

Jaime Fernández-Concha Schwalb[1], Carlos Torrecilla Ortiz[1], Jordi Cuñé Castellana[2]

1- Servicio de Urología, Hospital Universitario de Bellvitge-IDIBELL, Universidad de Barcelona, Barcelona, Spain; 2- Devicare, SL, Barcelona, Spain

INTRODUCTION

The use of double J ureteral stents is widely extended in the field of urolithiasis. A potentially severe associated complication is calcification, which is related to urinary pH.

OBJECTIVE

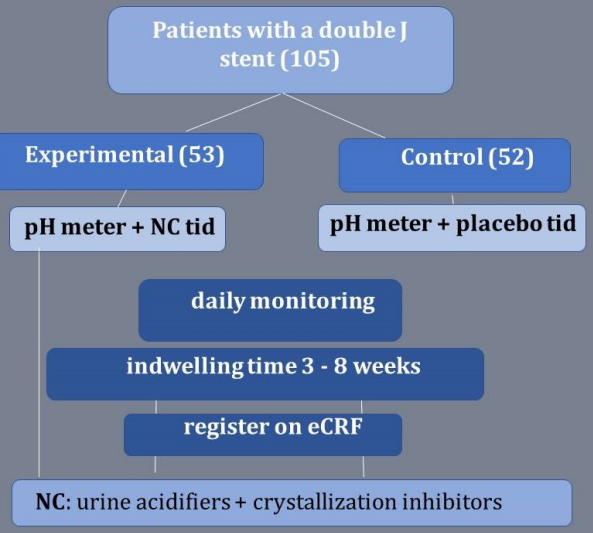
To evaluate the efficacy of a medical device and a nutraceutical (NC) in the control of urinary pH and prevention of calcification of ureteral stents.

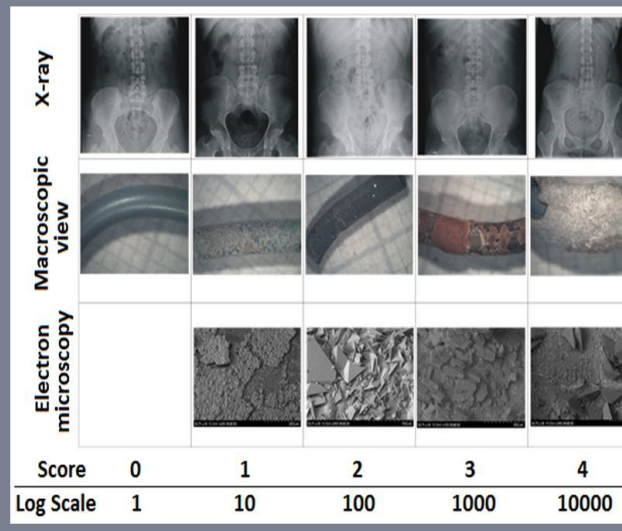
METHODS

Multicentre, controlled, double blind and randomized clinical trial conducted in 9 hospitals throughout Spain.

Inclusion criterion: Double J stent implanted <1 week ago with an expected duration of 3 to 8 weeks.

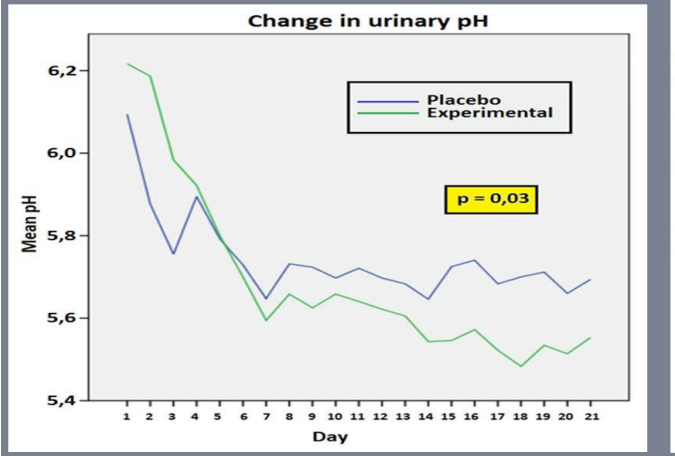
Exclusion criterion: Radiolucent stones or known acidic stone formers.

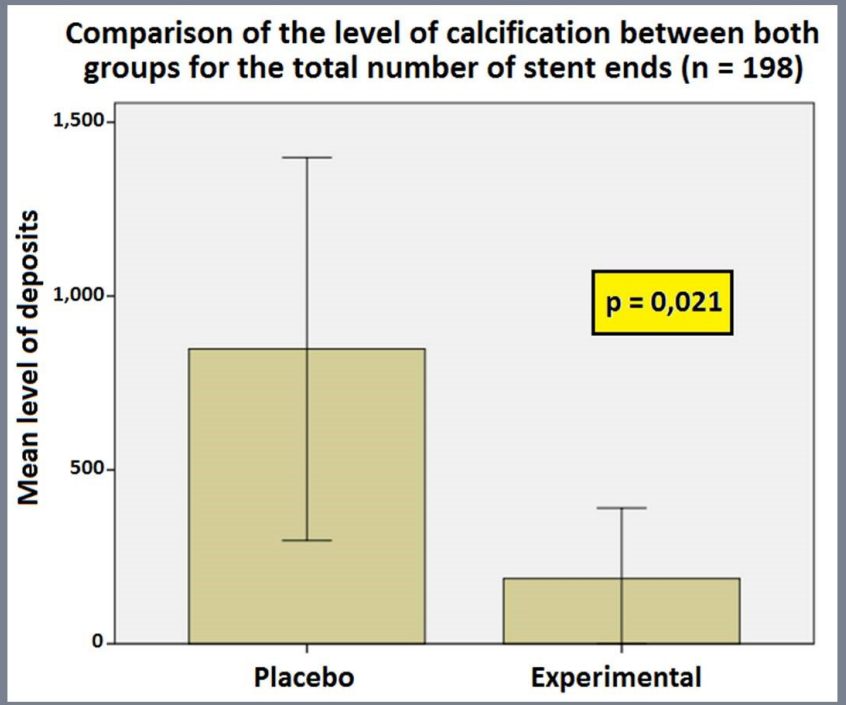


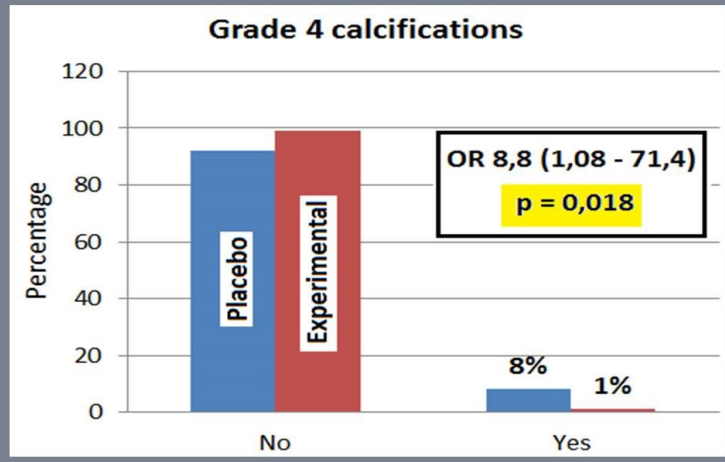


RESULTS

	p	Factor
Experimental group	0,005	PROTECTIVE
First catheterization	0,053	-
Silicone or polyurethane	0,376	-
Stent permanence (>39d)	0,011	RISK
Female gender	0,202	-
Age > 49y	0,023	PROTECTIVE







CONCLUSIONS

Urine acidification plus crystallization inhibitors in patients indwelling a double J stent significantly decreases calcification rate, reducing the need for additional surgical manoeuvers as well as risk for the patient.