

# INFECTION FREE PERITONEAL CATHETER SURVIVAL AFTER SUBCUTANEOUS CUFF REMOVAL IN PERSISTENT EXIT-SITE INFECTIONS

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**Objectives:** Surgical excision of subcutaneous cuff in double cuff peritoneal catheters with persistent exit-site infection after appropriated antibiotic treatment can prevent or delay its removal. No large number of cases have been reported to estimate the benefits of this method <sup>1,2</sup>. We present the results obtained in our center in all catheters (n=22) in which this method has been applied.

**Material and methods:** It has been implanted 220 double cuff straight Tenckhoff catheters in our unit from March -1993 to August -2015. **Surgical removal of subcutaneous cuff has been performed in 22 of them** due to persistent infection after a minimum of two weeks of appropriate antibiotic treatment. These catheters were implanted in 19 patients (3 patients with two catheters ) with a mean age of 46 years (range 16 to 78 years), 41 per cent of them with diabetes mellitus.

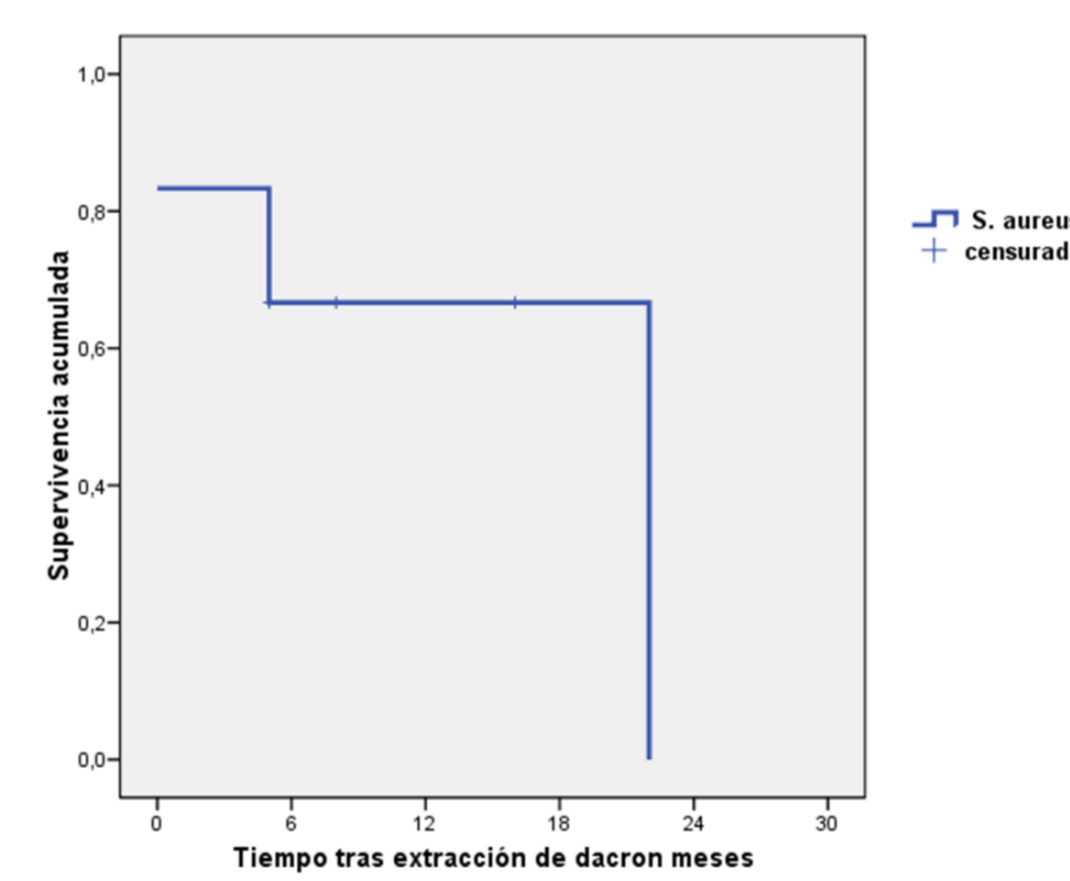
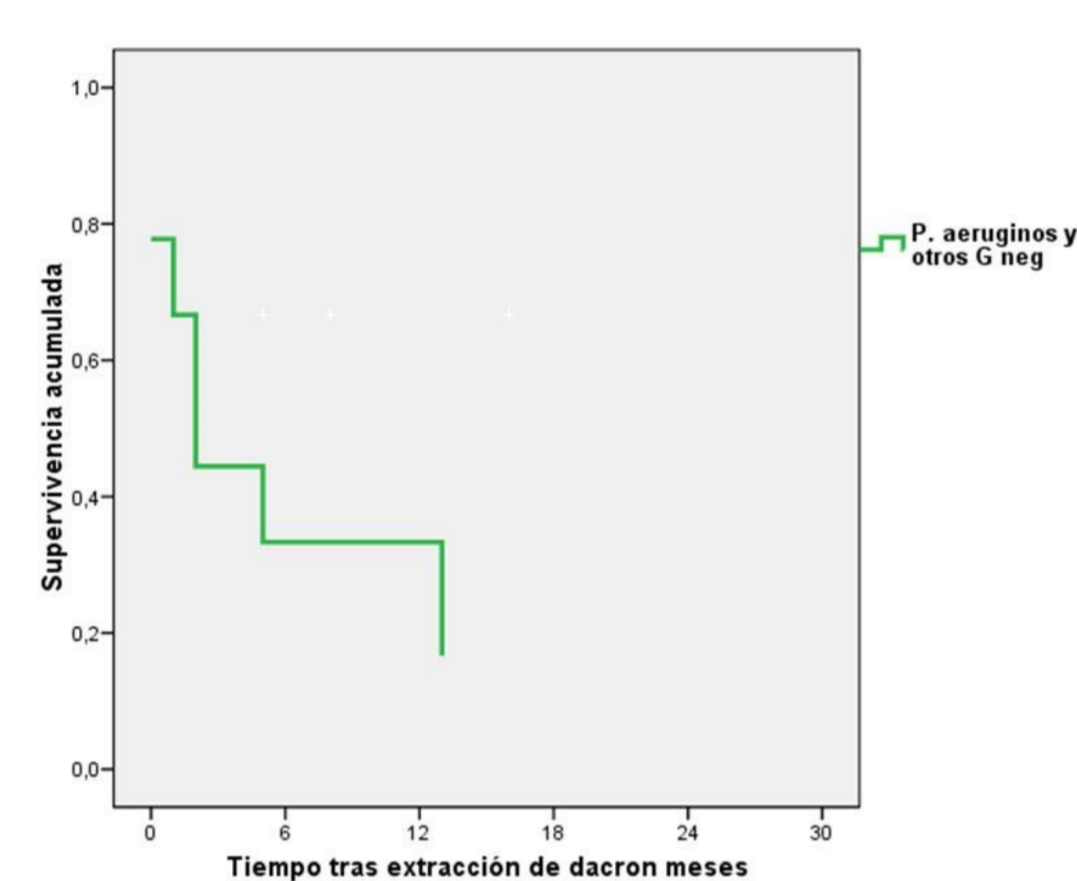
**Group 1:** 9 cases with Gram negative infections (7 *Pseudomonas aeruginosa*, 1 *Serratia sp.* and 1 *Proteus sp.* infections).

**Group 2:** 7 cases with *S. aureus* infection. **Group 3:** 3 negative culture results and 1 *S. epidermidis* infection. **Group 4:** 2 atypical *Mycobacteria* infections. After surgical extraction , antibiotic treatment has been prolonged during two weeks until proper healing. There were at the surgical procedure no catheter-related peritonitis .

## Results:

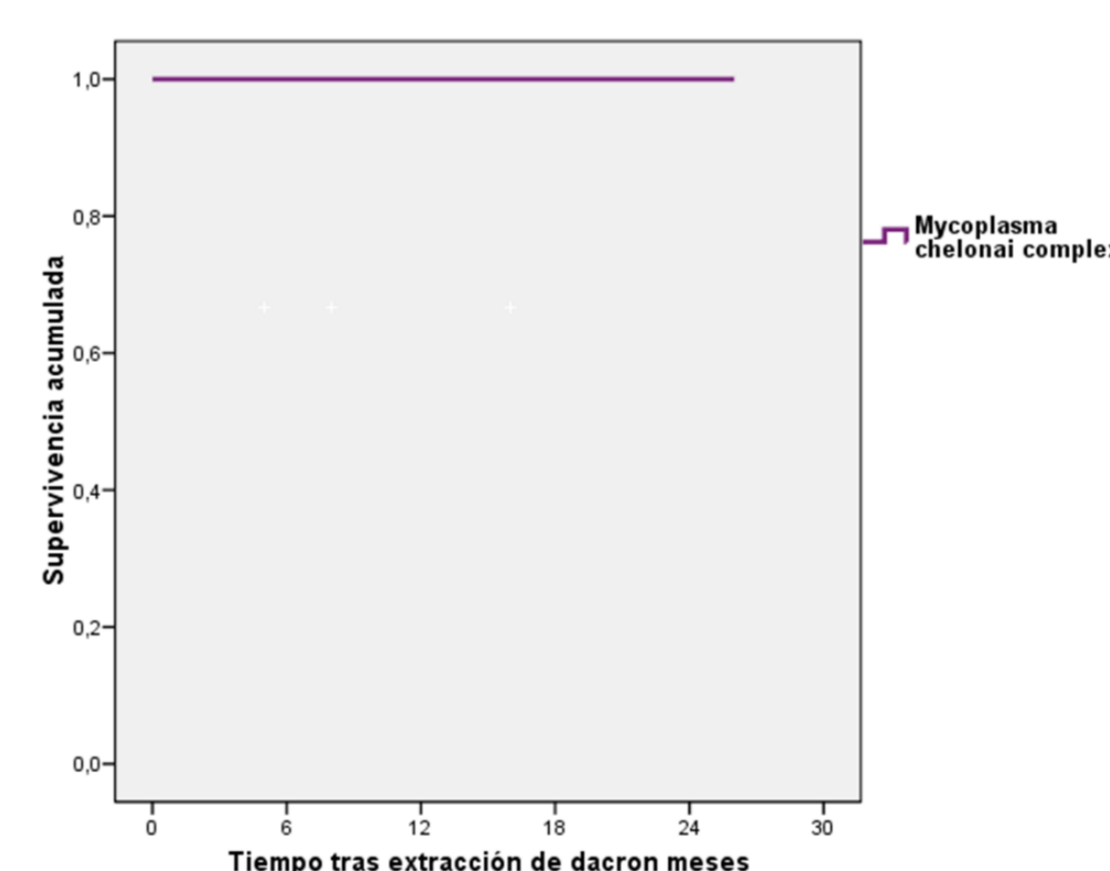
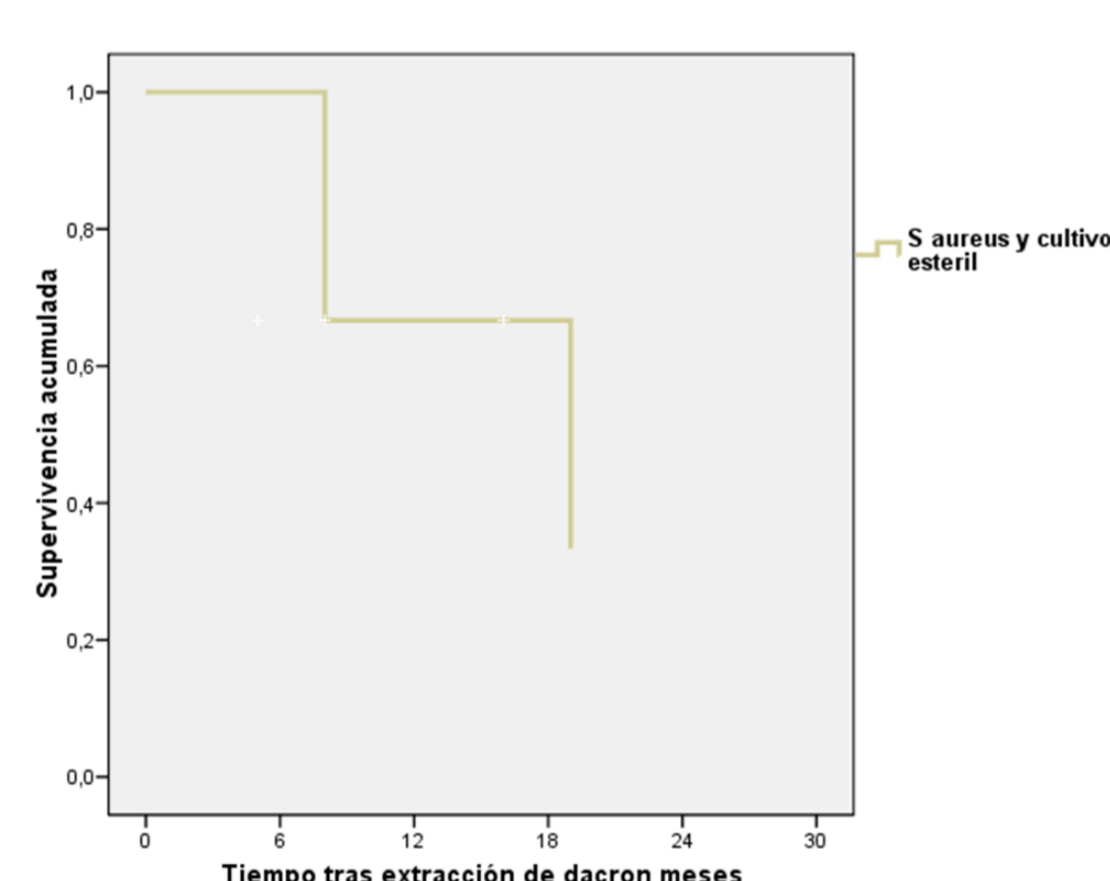
**Group 1: The worst results were obtained in the group of Gram negative infections.** 7 catheters removed by persistent infection , 3 of them in the first month of follow up, and the remainder at 2,3,5 y 13 months. Only two catheters cured, removed at 9 and 13 months by non-infectious reasons.

**Group 2: *S. aureus* infection.** Three catheters removed because persistent or repeat infection , two in the first month and one at 22 months. 4 catheters removed by non infectious reasons at 3,4, 5 and 6 months.



**Group 3: Culture negative and *S epidermidis* infection.** 2 catheters removed due to persistent or repeat infection at 6 and 19 months, 1 removed by non infectious reason at 19 months.

**Group 4: Atypical *Mycobacteria spp.* infection.** Good results, both catheters with 12 and 26 months of follow up, removed by non infectious reasons.



**Conclusions:** In our unit, surgical removal of subcutaneous cuff in exit-site infections refractory to antibiotic treatment without catheter-related peritonitis does not prolong infection free catheter survival for more than 6 months in approximately two thirds of Gram negative infections and in one third of *S. aureus* infections. Good results have been obtained in the two catheters with atypical Mycobacterial infections, with no repeat infections at 12 and 26 months of follow up, and notably, in these cases, this method has prevented a long term administration of a potentially toxic antibiotic treatment

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2. Suh H, Wadhwa NK, Cabralda T. Subcutaneous cuff removal in persistent exit-site/tunnel infections in peritoneal dialysis. *Adv Perit Dial.* 1995;11:157-9.