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SURGERY OF CUTANEOUS EXCISION AS TREATMENT TO EXIT SITE GRANULOMA RELATED TO PERITONEAL CATHETER REFRACTORY TO MEDICAL TREATMENT

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SUMMARY:

Exit site granuloma is one of the most frequent complications associated to peritoneal dialysis catheter, which usually solves by medical treatment, but sometimes it only solves by surgery.

In the following reports we present a clinical case which represents an example of this.

KEYWORDS: Granuloma. Cutaneous surgery. Peritoneal dialysis

RESUMEN:

El granuloma de sitio de salida es una de las complicaciones más frecuentes asociadas al catéter de diálisis peritoneal, la cual suele resolverse mediante tratamiento médico, sin embargo a veces sólo resuelve con tratamiento quirúrgico.

En el siguiente reporte presentamos un caso clínico que constituye un ejemplo de ello.

PALABRAS CLAVES:Granuloma. Escisión cutánea. Diálisis peritoneal

INTRODUCTION

Exit site granuloma is one the most frequent complications associated to peritoneal dialysis catheter, and needs treatment to prevent future peritoneal infections¹. Among the most commonly proposed treatments for its resolution are a local treatment with silver nitrate and/or by applying an acetamidohexanoic acid based ointment².

In this report we present the case of a patient, on peritoneal dialysis, who had an exit site granuloma which was not only of a considerable size (1cm x 1 cm), but also refractory to several therapeutic measures and eventually required cutaneous surgery for its resolution.

CASE REPORT:

Patient, male, 83 years old, on peritoneal dialysis (CAPD) with 10 months of evolution, who developed a peritoneal catheter exit site granuloma (Figure 1), which did not secrete and according to its appearance corresponded to the category "equivocal" of Twardowski's classification (Table 1).



Figure 1: Picture 1: Exit site before chirurgical treatment

	Perfect	Good	Equivocal	Acute Infection <4 weeks	Chronic Infection >4 weeks	Cuff Infection
Pain	--	--	--	may be	may be	over cuff
Colour	natural	natural /bright pink	redish /bright pink	redish /bright pink	redish /bright pink	natural /bright pink
Edema	--	--	--	may be	may be	Cuff induration
Costra	--	--	present	present	Present	--
Drainage	--	--	dried exudate	present	Present	present
Granuloma	--	--	Plane	exuberant	exuberant	--
Fissure	--	--	present	present	--	--

Table 1 : Exit site types: Twardowski classification

The general procedures for the exit site were: daily cleaning (twice a day) with soap and water, dry locally using a gauze, and cover the site with a sterile gauze held by hypoallergenic adhesive tape.

Initially this granuloma was treated by using a topic with a silver nitrate pencil (application: twice a week), and acetamidohexaenoic acid based ointment + gentamicin (application: twice a day).

Since granuloma not only did not solve, but continued growing and reaching big dimensions, and since this sort of lesion is a kind of subclinical infection, there is the concrete risk that its persistence leads to an acute exit site, tract and/or peritoneal cavity infection. Therefore, it was decided to surgically extract it by means of the local cutaneous excision technique (anaesthesia with lidocaine and suture with 0-4 nylon), which later evolved to healing completely (Figure 2).



Figure 2: Exit site after surgical treatment

By using this treatment the only documented complication was the extrusion of the external cuff of the peritoneal catheter, which nevertheless did not translate into any clinical complication.

DISCUSSION:

The eradication of an exit site granuloma caused by a peritoneal catheter is vital to reduce the risks of an acute infection setting whose eventual derivations could be to even compromise the catheter's useful life.

Habitual treatments used for this condition are:

- Local topic with silver nitrate pencil: This treatment is not recommended when the granuloma looks very exudative and has fissures in its surface. It can also irritate surrounding healthy skin.
- Acetamidohexanoic acid + gentamicin (ointment): This treatment is used in different dermatological lesions: superficial cutaneous ulcers (affects up to the superficial dermis) or medium ulcers (affects the deep dermis and even the hypodermis), pericostomy dermatitis and exit sites (equivocal or infected) of the peritoneal dialysis catheter. It has the advantage of not irritating the healthy skin areas which surround the granuloma, which makes its application easier to the patient.

In the present reported clinical case the exit site lesion was resolved with cutaneous excision surgery^{3,4}, which, in a case like this, has the advantage in comparison with other techniques (laser, radiofrequency, criosurgery) of involving a lower risk of damage to the catheter and/or leave a great necrotic residual lesion.

Therefore, we conclude that this surgical technique is a good alternative for the treatment of a big exit site granuloma refractory to medical measures

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