

Treatment of pilonidal disease in short-stay surgery: personal method



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Introduction

The treatment of pilonidal sinus (P.S.), a frequent disease, represents for the surgeon a not simple problem because of post-surgery complications and high recurrence rates.

The P.S. is the more frequent lesion of sacrococcygeal region in young grownups, specially between II and III decade of age with more incidence in the male sex (1,1%) than female sex (0,11%) (1, 2).

About etiology, until now not clear, assumes more credit the hypothesis of an acquired mechanism than congenital, in accord to our anatomic-pathology results that prove the first (3, 4, 5, 6).

The surgical treatment of this disease has to respect some basic rules: short hospital stay, treatment by local anesthesia, poor complications and lack of recidivations; all this to obtain a fast return to work with good compliance of the patient.

Many methods have been performed in the past years, always to obtain results in accord to rules before described, and all this underlines the importance of a gold procedure.

After the examination of many surgical procedures, from marsupialization supported by some authors to avoid recurrences, to primary closure (1, 7, 8, 9, 10, 11) that reduce the time of hospital stay but has affected by complications and high recurrences rate, now we want to

Riassunto

TRATTAMENTO CHIRURGICO DELLA MALATTIA PILONIDALE IN REGIME DI RICOVERO BREVE: METODO PERSONALE

Introduzione: Si vuole dimostrare che il metodo adottato, consistente nella escissione e chiusura in prima intenzione del seno pilonidale è in grado di produrre una bassa percentuale di recidive ed un rapido ritorno alla attività lavorativa.

Pazienti e Metodo: L'indagine è stata condotta su 315 pazienti sottoposti a trattamento di escissione e chiusura in prima intenzione del sinus pilonidale in anestesia loco-regionale. Tutti i pazienti sono stati dimessi in 2a giornata.

Risultati: Non vi sono state complicanze intraoperatorie; per quanto riguarda la morbidità, abbiamo avuto il 4% di sieromi che sono stati trattati con tecnica conservativa incruenta.

Conclusioni: Con il metodo utilizzato abbiamo ottenuto ottimi risultati, a breve e lungo termine, con meno recidive e rapido ritorno all'attività lavorativa.

Parole chiave: Seno pilonidale; chirurgia ambulatoriale, trattamento chirurgico, chiusura in prima intenzione.

Abstract

Hypothesis: we state that our personal method constituted by excission and primary closure in the treatment of pilonidal sinus, is able to obtain a low rate of recurrence and a fast return to work.

Patients and methods: our report has been conducted on 315 patients. Excission and primary closure in the treatment of pilonidal sinus by loco-regional anesthesia. The patients have been discharged on second day.

Results: we have not had intraoperative complication; about morbidità there have been 4% of seromas treated conservatively.

Conclusions: with this personal method we have obtained very good results, in short and long time, with less of recurrences and fast return to work.

Key words: Pilonidal sinus; short-stay surgery; surgical treatment; primary closure.

illustrate our technique that, in accord to rules before described, is able to obtain good results on long term.

Materials and methods

In ten years we have treated 315 patients with pilonidal disease; 25% (n. 79) with P.S. not complicated, 70% (n. 221) with multifistulas, 5% (n. 15) with fistulas far away some centimeters from internatal line.

Almost all patients (312 equal to 99%) have been treated by excision and direct suture. By loco-regional anesthesia we have highlighted the fistula by coloration with methylene blue, after has been performed an incision comprehending all fistula, with excision of tissue unto presacral band. The hemostasis has been performed by diathermocoagulator only for bigger vases, the closure by silky stitches (according to Donati), comprehending cutis, subcutis and presacral band (Figg. 1-2).

This last procedure has been performed to obtain haemostasis and, first of all, the persistence of residuary cavity, which is, according to us, a main cause of recurrence.

Lastly has been juxtaposed a roll of lint on the wound and here attached with medication by strip to obtain a good compression on wound for 24 hours in the post operative period.

In 3 patients (1%) with multifistulas far away from internatal line we have used the method of excision and rebuilding by skin flap transposition, described by Dufourmental (7).

The patients have been discharged on second day after rimotion of the roll and medication; on sixty day, by ambulatorial check, have been removed the stitches.

The follow-up has been performed on regular lags, depilating near wound, unto recovery and consolidation of

scar; further check has been performed at 3, 6 and 12 months.

Results

We have not had intraoperative complications; about morbidity there have been 12 cases (4%) of seromas, treated conservatively by evacuative puncture and compression, and healed between fifth e eight day for diagnosis; in other cases we have obtained a good healing on twelfth day.

In the next follow-ups have been highlithed 10 cases (3%) of recurrances in patients with multifistulas, some near vent; theese patients have been underwent by the same procedure.

Discussion and conclusions

Between many methods adopted until now for therapy of P.S., we perform since always the technique of radical excision of fistula unto sacral band and suture of cutis, subcutis and band with silk stitches (according to Donati) and compression on surgical wound.

With this method, used in primary diseases and in the recurrances, we have obtained very good results, in short and long time, with less of recurrances.

Is very important, to obtain good results and to avoid recurrances, the hygiene and systematic depilation of sacrococcygeal region.

Our experience about the treatment of the P.S., in short-stay and in day-hospital, with local anesthesya, has accepted by patients and the results until now obtained, with fast healing, low recurrances rate and fast return to work, emphasize the usefulness of this technique.



Fig. 1: Intraoperative Image: the closure by silky stitches (according to Donati), comprehending cutis, subcutis and presacral band.

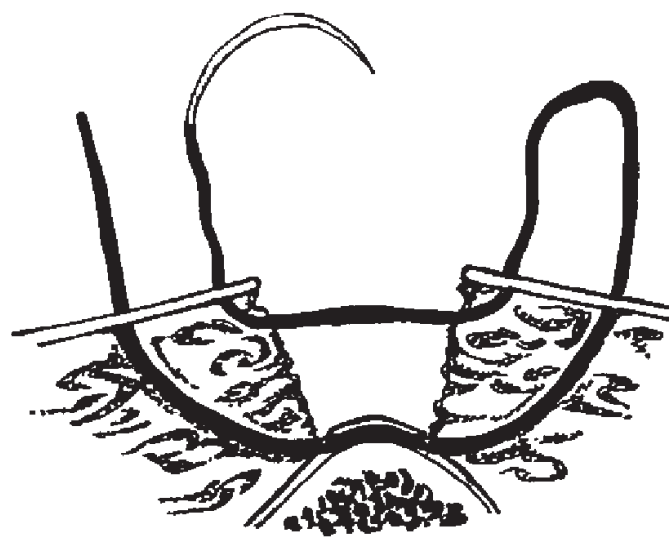


Fig. 2: Pattern of the stitch.

References

- 1) Allen-Mersh TG.: *Pilonidal sinus: finding the right track for treatment*. Br J Surg, 1990, 77:123-32.
- 2) Nivatvongs S.: *Pilonidal Disease*. In: Nicholls R.J., Dozois R.R., eds.: *Surgery of the Colon & Rectum*. New York: Churchill Livingstones, 1997, p.245-54.
- 3) Haworth J.V., Zachary R.B.: *Congenital dermal sinuses in children-their relation to pilonidal sinus*. Lancet, 1955, 11:10-5.
- 4) Raffman R.A.: *A re-valuation of pathogenesis of pilonidal sinus*. Ann Surg, 1959, 150:895-9.
- 5) Chamberlain J.W., Vawter G.F.: *The congenital origin of pilonidal sinus*. J Pediatr Surg, 1974, 9:441-4.
- 6) Bascom J.: *Pilonidal disease: long-term results of follicle removal*. Dis Colon Rectum, 1983, 26:800-7.
- 7) Dufourmentel C.: *Kystes et fistules sacro-coccygeus: discussion pathogenetique et therapeutique*. Ann Chir Plas, 1966, 22:181-3.
- 8) Leichtling J.J.: *Simple primary closure for sacrococcygeal pilonidal disease*. Am J Surg, 1967, 113:441-4.
- 9) Notaras M.J.: *A review of the popular methods of treatment of postanal (pilonidalis) sinus disease*. Br J Surg, 1970, 57:886-90.
- 10) Aydede H., Erhan Y., Sakayra A., Kumkumoglu Y.: *Comparison of three methods in surgical treatment of pilonidal disease*. Anz J Surg, 2001, 71:362-4.
- 11) Tritapepe R., Di Padova C.: *Excision and primary closure of pilonidal sinus using a drain for antiseptic wound flushing*. Am J Surg, 2002, 183:209-11.

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