

Choosing the correct side for Karydakis flap

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Abstract

Objective Choosing the correct side for Karydakis flap in treatment of pilonidal disease in certain cases.

Method When the cyst or diseased tissues appear deep into the opposite side it may create some annoying problems, like too thin skin edge, dead space and wound failure. Herein, a simple modification of skin incision

marking to over-come this potential problem is described.

Conclusion This simple technical offer could be useful when dealing with sacrococcygeal pilonidal disease in daily surgical practice.

Keywords Pilonidal sinus, Karydakis flap, skin marking

Introduction

Although pilonidal sinus is a minor surgical problem, most surgical alternatives for its treatment still have high failure rates. Karydakis accused the depth of the natal cleft and leaving the suture line in the midline with tension for surgical failure, and described his advancing flap operation for the radical cure [1]. After his report presenting satisfying results with Karydakis flap, many other centres have been able to duplicate this success to date [1–3].

Karydakis flap basically consist of an asymmetric elliptical incision at the sacral region. It has to cover all sinus openings and the pilonidal cyst located in the subcutaneous tissue. This is obviously easy if the localization of the cyst can be determined by inspection or palpation. However, in some cases, it is not clear for the surgeon to choose the correct side. When the elliptical incision goes deep in the subcutaneous tissue and the surgeon realizes the cyst located in the other side, there is obvious trouble. To solve this problem a simple modification for the Karydakis flap incision marking is described in this paper.

Technique

The patient is positioned prone and the buttocks strapped apart, as usual. After regional shaving, the modified incision is set with a permanent marker either before or

after antiseptic solution is used. The modified incision is a combination of two larger asymmetric full elliptic incisions. They are placed 2 cm to each side of the midline as in standard Karydakis flap incision. The two incisions are intersected to create a smaller elliptical incision which is symmetric to the midline. This smaller marking is the first step to be incised (Fig. 1).

A few millilitres of methylene blue may be given through external opening(s) to see the cyst (sinus) and its ramifications more clearly. Then the skin is incised to the subcutaneous tissue. When the smaller elliptical incision has come deep into subcutaneous level, both sides to the midline are observed to see the cyst localization: right or left? This step will ensure the surgeon goes in the correct direction for the larger elliptical incision. The side in which the cyst is located is chosen and skin and subcutaneous tissues are excised in en-bloc fashion. The procedure is continued and completed as in standard Karydakis operation described before [1,2].

Discussion

Karydakis flap has been accepted as a promising surgical procedure for treatment of pilonidal disease. The surgeon makes an eccentric, elliptical incision over the all primary and secondary openings and indurations or previous abscess drainage incisions. It is possible to choose either side if the disease seems to be located completely central. However, in some cases, the cyst and its extensions can cause a surprise to the surgeon, especially where preoperative ultrasound examination is not available. He or she may choose one side for elliptical incision, and meet

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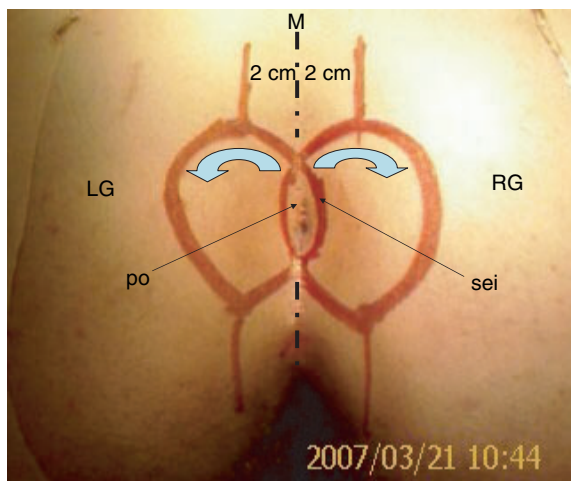


Figure 1 Bilateral skin marking. Two larger markings intersected over the midline to make up a smaller one. It is possible to go on either side (large curved arrows) after direct vision by deepening first via smaller incision. M, midline; LG, left glutea; RG, right glutea; po, primary openings; sei, smaller elliptical incision marking.

diseased tissues on the other side which had a normal gross appearance before the incision. In this situation, excision of the cyst and its ramifications on the medial side of the incision already made may create some annoying problems, like too thin a wound edge and dead space. Thus, an early failure can be encountered due to skin necrosis, wound tension or disruption, haematoma or abscess.

Despite the new flap techniques that have brought excellent results into treatment of pilonidal disease it has been reported that most of them have their own shortcomings in the healing process. Therefore, some authors have presented small modifications for the closure techniques to overcome the problems [4–6]. A V cut can be employed for the secondary opening close to the main elliptical incision [2] or total subcutaneous fistulectomy can be added to Karydakís flap for secondary perianal openings [6]. Nevertheless, to meet the disease completely or mostly located under the medial side of the

incision is a different and usually a bigger problem. The simple strategy described here offers an acceptable solution for that problem. Bilateral skin marking and the smaller starting incision makes the procedure flexible and the surgeon can go on the correct side with security.

This strategy can also be useful for cases with local anaesthesia. The smaller elliptical incision is injected with anaesthetic agent first, then the infiltration is enhanced under the skin marking on the right side chosen correctly by direct vision. This would optimize not only the extent of infiltration area but also the amount of local anaesthetic needed.

In fact, a simple surgical strategy rather than a surgical modification is presented here. It is not a modified incision, rather a strategic skin marking to make the same but correct incision for Karydakís flap. The author has experienced its benefit and thinks that this simple technical offer could be useful for surgeons dealing with sacrococcygeal pilonidal disease in their daily practice.

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