

Could Early Postoperative Complications be Considered as Risk Factor for Recurrence after Pilonidal Sinus Surgery?

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Abstract

Background: There is no widespread consensus in treatment techniques of sacrococcygeal pilonidal disease (PD). Among surgical techniques, especially Karydakias procedure (KP) or modified Limberg flap (MLF), are frequently preferred. Causing prolonged follow-up and return to daily activity, postoperative complications are very annoying. We aimed to determine risk factors for possible complications and especially recurrence in the patients undergoing surgical treatment for PD.

Methods: This is a seven-year retrospective study, which was conducted between January 2011 and January 2018. Eight hundred forty-one patients were evaluated in this work. We performed the same technique-the same surgeon approach in our surgical treatment. All cases were divided into two groups as KP (n=417) and MLF (n=424).

Results: It was found no significant difference between the KP and MLF groups in terms of age, gender, BMI, smoking, history of acute abscess drainage (HAAD), the timing of suture removal, the follow-up period, seroma, hematoma, dehiscence, wound infection (WI), pain and recurrence. In this study, the follow-up period of patients was 48.6 ± 21.4 months in KP group and 48.2 ± 21.7 months in MLF group (Mean \pm SD). American Society of Anesthesiologists (ASA) score were found to be higher in the KP group. While mean duration of operation (DO) was shorter in the KP group, the timing of drain removal, hospitalisation period and return to daily activity (RDA) were longer. There was an established enhancing effect of BMI, HAAD, DO, and RDA on the early complications (EC) development in both of the groups, and of ASA scores on the EC development in the KP group. The rate of recurrence ratio was determined to be 6% in the KP and 4.72% in the MLF groups. In both of the groups, dehiscence or WI was found to be risk factors for recurrence.

Conclusion: Although its DO is short, KP technique bear some of the disadvantages such as prolonged HP and delayed RDA. A significant positive correlation was found between various factors such as higher BMI, presence of HAAD, prolonged DO, prolonged RDA and the development of EC in both groups. We concluded that dehiscence and WI from EC may be evaluated as independent risk factors for recurrence. We also concluded that recurrence may be prevented if wound care is carried out carefully in the patients who developed dehiscence or wound infection.

Key words: pilonidal disease, Karydakias procedure, Limberg Flap, dehiscence, wound infection, recurrence