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ORIGINAL ARTICLE

V-Y Advancement Flap Technique in Resurfacing Postexcisional Defect in Cases with Pilonidal Sinus Disease—Study of 25 Cases

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Abstract We report our experience of technique of V-Y-plasty in treatment of pilonidal sinus. A retrospective study of 25 patients performed from 2005 to 2010 at Deenanath Mangeshkar Hospital and Sassoon General Hospitals, Pune, was performed. The unilateral or bilateral V-Y advancement flap technique was used in the management of these patients. The outcome was assessed on the basis of efficacy of flap surgery in achieving wound healing and recurrence. The follow-up ranged from 6 months to 5 years. The study included 25 cases of pilonidal sinus. Nineteen patients (76%) underwent unilateral V-Y-plasty and six patients (24%) underwent bilateral V-Y-plasty. Eighty-four percent cases were from the age group of 21–30 years. Sixty-eight percent patients were mobilized on the fourth postoperative day and 32% patients were mobilized on the third postoperative day. No recurrence was found in any of the patients. Itching and hypertrophic scar were found in two cases (8%), and decreased sensation was found in one patient (4%). The V-Y advancement flap technique for the treatment of pilonidal sinus is efficient and can reduce recurrence. Unilateral/bilateral V-Y flap achieves suture line away from midline, obliteration of natal fold and coverage of defect without tension. In follow-up none of the patients showed recurrence. This technique has distinctly less morbidity and avoids of multiple dressings, reducing the total cost of the treatment. V-Y advancement flap is distinctly better choice among the available flaps as it is less time-consuming, requires less technical expertise as compared to Z-plasty and perforator flaps, and is reliable and easy to plan.

Keywords Pilonidal sinus · V-Y advancement flap

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Introduction

Pilonidal sinus disease was first reported 150 years ago. Incidence of pilonidal disease is about 26 per 100,000 population [1]. Pilonidal disease occurs predominantly in males, at a ratio of about 4:1. It occurs predominantly in white patients, typically in the late teens to early twenties, decreasing after age 25 and rarely occurs after age 45 [2].

In 1950, pilonidal sinus was thought to be of congenital origin rather than acquired disorder [1]. This seemingly minor disease process has baffled physicians as demonstrated by multiple theories of its etiology and management in the current literature. For a time, the entity was referred as "jeep rider's disease" [1].

Over the past 25 years, many treatments have been advocated for pilonidal sinus but no consensus has emerged, and there have been a few studies comparing relative treatment cost, discomfort, and time off work. Various methods of treating pilonidal sinus have been evolved since1965 in the form of the following: tract curettage/brushing with excision of follicle opening [3], phenol injection into tract [4], diathermy of pilonidal pit [5], laying open of pilonidal sinus and healing by granulation [6], excision and primary closure [4, 7], and excision up to sacrum and skin flaps [8]. Asymmetric closure appears most promising, as there is fast recovery and low recurrence rate, minimal patient inconvenience, and minimum time off work.

The primary goal of the advancement flap is to transfer the tension of the scar that would result from side-to-side