

Research Article

# Evaluation of Effect of *Katupila Arka* in Post-Operative Fistulotomy wound Management: A Case Report

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## I N F O

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## A B S T R A C T

**Introduction:** *Securinega leucopyrus Muell.* is known as *Humari* in India, *Katupila* in Sri Lanka and *Spinous fluggea* in English. It is a desert climatic plant used topically in paste form for healing of acute, chronic and non-healing wounds as a folklore practice in Sri Lanka. The aim of this study is to evaluate the role of *Katupila Arka* in the management of post-operative wound of fistulotomy.

**Methodology:** It is a case report of a 42 years old male patient who presented with the chief complains of swelling around the anal region associated with pain and pus discharge. On examination, it was diagnosed as subcutaneous low-level fistula. Hence, he was treated by fistulotomy under local anesthesia. The wound was dressed with *Katupila Arka* twice daily for 1 week and once daily for a period of 14 days.

**Result:** Complete healing of the post-operative wound was observed in 3 weeks period without any complications.

**Discussion:** Post-operative fistulotomy wound is a contaminated wound and is more prone to get further contamination by feces, which may lead to secondary infections or delayed wound healing. So, management of such wounds is a challenging task. In the present case, *Katupila Arka* has shown promising results in successful management of the post fistulotomy wound with ease and devoid of any complications. Further clinical study is needed to evaluate the effectiveness in larger sample.

**Keywords:** *Securinega leucopyrus Muell.*, *Katupila*, *Spinous Fluggea*, *Arka*, *Fistulotomy*, *Wound*, *Contaminated Wound*, *Non-Healing Wound*, *Dressing*

## Introduction

Fistulotomy is one among the surgical procedure used to treat fistula,<sup>1</sup> which leaves the patient with secondary healing of the post-operative wound. Managing these

wounds has been a challenging task, as it gets very less resting period and is more prone to get contaminated by feces, which hinders wound health and delays wound healing. Thus, these wounds are classified under the

category of contaminated wounds.<sup>2</sup> *Securinega leucopyrus Muell.* is known as *Humari* in India, *Katupila* in Sri Lanka and Spinous fluggea in English. It is a plant which grows in desert and is used topically as paste as a cure for acute, chronic and non-healing wounds as a traditional practice in Sri Lanka.<sup>3,4</sup> This drug is easily available in Sri Lanka and has been used for various disorders. Pharmacognostic study of *Katupila* shows the presence of calcium oxalate, tannin and oil which is necessary for wound healing.<sup>3,4</sup> In Ayurveda, *Acharya Sushruta* has described *Shashti Upakramas*<sup>5</sup> for comprehensive management of *Vrana* (wound). This shows the importance of local application of different drugs. Hence, this case study was undertaken to evaluate the role of *Katupila* in the form of *Arka* in the management of post-operative fistulotomy wound. For the study, the drug was procured from an authentic source in Sri Lanka and the *Arka* was prepared by classical distillation method and was stored in a glass container in a cool and dry place.

### Case Report

A 42 years old male patient with no significant medical history, presented with the chief complains of swelling around the anal region associated with pain and pus discharge. On examination, a low-level fistula with external opening at 6 o'clock position, about 3 cm from the anal verge, was observed. Digital rectal examination revealed internal opening at 6 o'clock position at the level lower  $1/3^{\text{rd}}$  of anal canal. Hence, it was diagnosed as subcutaneous low-level fistula. Study was done after obtaining an informed consent from the patient.

### Intervention

He was treated by fistulotomy under local anesthesia. The wound was dressed with sterile gauze soaked in *Katupila Arka* twice daily for 1 week and once daily for a period of 2 weeks. Patient was observed for a period of 3 weeks.



Figure 2. Post Op Day 7



Figure 3. Post Op Day 14



Figure 1. Post Op Day 1

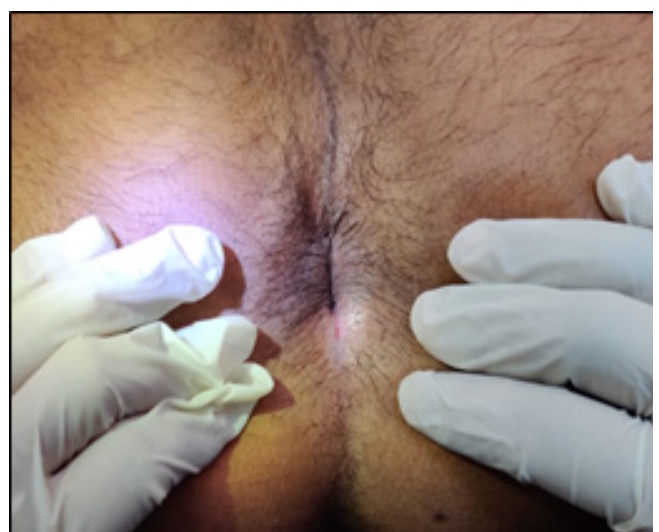


Figure 4. Post Op Day 21

## Result

It was observed that the wound was completely healed in 3 weeks period, without any complications and with minimal scarring.

## Discussion

Post-operative fistulotomy wound is a contaminated wound and is more prone to get further contamination by feces, which may lead to secondary infections or delayed wound healing. So, management of such wounds is a challenging task. In the present case, *Katupila Arka* has shown promising results in successfully managing the post-operative fistulotomy wound with ease and devoid of any complications. *Katupila* possesses *Kashaya* and *Tikta Rasa*; *Lagu*, *Ruksha*, *Tikshna Gunas*; *Ushna Veerya*, *Katu Vipaka* and exerted *Lekhana* action and thus, helped in removing the debris and unhealthy tissue and slough.<sup>3,4</sup> In a week's period, sloping edge and healthy granulations were appreciated and the discharge from the wound was also scanty. The antioxidant activity due to the presence of flavonoids and tannins in abundance in *Katupila*, it has proven to promote wound healing.<sup>6</sup> It is also found to be cost effective, safe and easy to apply.

## Conclusion

As per the folklore practice, *Katupila* is used in the form of *Kalka* for the management of diabetic ulcers.<sup>3,4</sup> Preparing *Kalka* on a daily basis is not an easy task. Thus, coming up with a better option like *Arka* which is easy to prepare and can be preserved for a much longer duration, would make its applicability easier and, as it will contain the active principles of the drug, we can expect it to have better results. In the present case, *Katupila Arka* has shown promising results in challenging conditions like a contaminated post-operative fistulotomy wound. Thus, it can be stated that *Katupilla Arka* is effective in the management of post-operative fistulotomy wound. Further clinical study may be needed to evaluate the effectiveness in larger sample.

**Conflict of Interest:** None

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