



A Case Series Study on The Effect of Eranda Taila And Karpoora Paste In Management of Gingivitis

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Abstract:-

Gingivitis is common periodontal disease. The symptoms present are swollen gums, pain and bleeding. Main cause is lack of maintenance of proper oral hygiene. In ayurveda it comes under *danthamoolagata rogas*. A case series on management of gingivitis is discussed. Twenty patients in the age group of 15 to 50 yrs from both sexes were included and the patients having fungal infections, oral carcinoma, leukaemia, dental carries were excluded. The patients were advised to apply the paste of Eranda taila (castor oil) and Karpoora (camphor) twice a day for 20 minutes for 7 days and were and to maintain proper oral hygiene. The assessments of symptoms were done at the end of 7 days and follow up after 15 days and 1 month. The pain, swelling and bleeding was also considerably reduced. The combination of these two shows considerable relief in patients having gingivitis.

Key Words- Gingivitis, Eranda taila, Karpoora, Castor oil, Camphor

Introduction:

Gums or gingival is a part of soft tissue lining the mouth. They surround the teeth and provide a seal over them. It lies over the mandible and maxilla inside the mouth. The gums are tightly bound to the underlying bone and help to resist the friction of fluid passing over them. Healthy gums are very essential as it act as an effective barrier to periodontal insult to the deeper tissue. When gums are not healthy it provides a gateway for periodontal disease to advance to deeper tissue of periodontium.

Gingivitis is a common type of periodontal disease that cause irritation redness and swelling of gingival. It is a very common condition seen in most of the individual now a day. It is common among children and elderly people. It should be treated at the right time, if left untreated it may result in much more serious condition called periodontitis and it may lead to loss of teeth. Poor oral hygiene is the main cause of gingivitis. Due to poor oral hygiene there will be formation of plaque and if this plaque is not cleaned daily it will form tartar. The tartar is very difficult to remove one has consult a dentist to remove the tartar. If the tartar is also not removed immediately it will lead to gingivitis.

In ayurveda this can be correlated to *Danthamoolagata rogas* as it is affecting the gums. Eranda taila and Karpoora are having *ruk* and *sopha hara* property along with analgesic effect.

Materials And Methods

In this present study effect of the combination of *Eranda taila* and *Karpoora paste* will be analysed by a case series study.

This is a case series study including twenty patients. The purpose of the study is to evaluate the effect of *Eranda taila* and *Karpoora* paste on Gingivitis.

Inclusion criteria include the patients from age group of 15 to 50 yrs of both sexes.

Exclusion criteria include the patients having fungal infections, oral carcinoma, leukaemia, and dental caries.

Methodology

Twenty patients including both male and female were selected. The patients having pain, bleeding and swelling were selected.

Treatment Plan

The treatment was done using *Eranda taila* and *Karpoora* in paste form.

The patients were asked to apply the paste 5ml of *Eranda taila* (castor oil) and 2g of *Karpoora* (camphor) twice a day for 20 minutes for 7 days on the affected part of the gums and was asked to take *gandusha* with *ushnajala* after the medicine is removed and was advised to maintain proper oral hygiene.

The patients were advised for follow up after 15th day and 1 month.

The patients were advised for proper maintenance of oral hygiene during follow up period.

Assessment

The assessment of symptoms was done after 7 days and there was a follow up period after 15th day and 1 month.

The pain was reduced considerably, swelling and bleeding also considerably reduced in most of the patients.

Pain was assessed using VAS scale. Swelling and bleeding was assessed the grading of swelling and bleeding was done according to the severity of symptoms.

The grading of Pain, Swelling and bleeding are described in Table 1, Table 2 and Table 3 given below

Table 1 – Grading of Pain

Pain	Grading
0	0
1-3	1
4-6	2
7 & above	3

Table 2- Grading of Bleeding

Bleeding	Grading
Absent	0
Mild	1
Moderate	2
Severe	3

Table 3- Grading of Swelling

Swelling	Grading
Absent	0
Mild	1
Moderate	2
Severe	3

Follow up

The follow up was done after 15 days and 1 month.

All the parameters were analysed during the follow up period. The recurrence interval of symptoms was considerably prolonged and severity was also reduced.

Result

The results on effect of pain, bleeding and swelling are described in Table 4, Table 5 and Table 6 given below.

Table 4- Effect on Pain

Pain		N	Mean Rank	Z - value	P- value
Pain AT – Pain BT	Negative rank	20 ^a	10.50	-4.038 ^b	0.0001
	Positive rank	0 ^b			
	Ties	0 ^c			
Pain FU – Pain BT	Negative rank	20 ^d	10.50	-4.061 ^b	0.0001
	Positive rank	0 ^e			
	Ties	0 ^f			
a - AT< BT; b - AT>BT; c - AT = BT d - AT< BT; e - AT>BT; f - AT = BT					

Table 5- Effect on Swelling

Swelling		N	Mean Rank	Z - value	P- value
Swelling AT – Swelling BT	Negative rank	20 ^a	10.50	-4.472 ^b	0.0001
	Positive rank	0 ^b			
	Ties	0 ^c			
Swelling FU – Swelling BT	Negative rank	20 ^d	10.50	-4.468 ^b	0.0001
	Positive rank	0 ^e			
	Ties	0 ^f			
a - AT< BT; b - AT>BT; c - AT = BT d - AT< BT; e - AT>BT; f - AT = BT					

Table 6- Effect on Bleeding

Bleeding		N	Mean Rank	Z - value	P- value
Bleeding AT – Bleeding BT	Negative rank	20 ^a	10.50	-4.093 ^b	0.0001
	Positive rank	0 ^b			
	Ties	0 ^c			
Bleeding FU – Bleeding BT	Negative rank	19 ^d	10.00	-4.038 ^b	0.0001
	Positive rank	0 ^e			
	Ties	1 ^f			
a - AT< BT; b - AT>BT; c - AT = BT d - AT< BT; e - AT>BT; f - AT = BT					

Discussion

The aim of this study was to evaluate the effect of *Eranda taila* and *Karpoora* paste in the management of Gingivitis. The symptoms like pain, bleeding and swelling were assessed. In this study 20 patients were selected all the patients completed the treatment. Out of these 15% children, 45% female and 40% male patients were there. 60% of the patients were not maintaining proper oral hygiene. Wilcoxon sign rank test was used to interpret the result. The statistical analysis showed that this formulation was effective in treatment of gingivitis.

Overall effect was calculated by comparing the assessment criteria before and after treatment and follow up period. There was significant reduction of all the symptoms and was found to be significant at $p < 0.05$. There was recurrence of symptoms in some of the patients but the interval was prolonged.

Probable Mode of Action

Eranda taila is having *madhura rasa*, *teekshna*, *pichila guna*, and is having *ruk* and *sopha hara* property¹. *Karpoora* is having *madhura*, *tikta*, *katu rasa* and *sheetha veerya* and is also having *vedanasthapana* and *sopha hara* property.² The chemical constituents present in *Eranda taila* and *Karpoora* have anti-inflammatory and analgesic effect. Some of the research articles have also proven that *Karpoora*^{3,4} and *Eranda taila*⁵ is having anti-inflammatory property. Some of the articles it has been proven that *Eranda taila* and *Karpoora* is having analgesic effect.⁶ Because of all these properties it can be said this formulation will be effective in treatment of Gingivitis and recurrence rate also will be prolonged.

Conclusion

In the present case series study the patients having symptoms of Gingivitis were selected *Eranda taila* and *Karpoora* were made into paste and it was applied on the affected area of the gums and the symptoms were assessed during the treatment period and follow up period and there was statistically significant effect from this it can be concluded that the *Eranda taila* and *Karpoora* paste was effective in management of gingivitis.

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