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## INTRODUCTION:

Corns and calluses are frequent disorders and as the picture below shows that there are many places mostly happened on feet. The most common therapeutic compound is salicylic acid for corns. Polyethylene glycols are used to enhance the aqueous solubility or dissolution characteristics of poorly soluble compounds. Glycerin is a hyroscopic agent that absorbs water from the air. Hence it moistures and softens skin against to keratosis. Polyacrylic acid increases adhesive activity for easy usage. The efficacy and tolerability of a our formulation for the topical treatment of corns and calluses developed by using penetration and solubility enhancers in both solution and gel forms.



## METHODS:

The treatment was started in five patients but one of them did not come to assessment of cure. Four people in different ages and sex joined the study with their own claims. Either solution or gel forms applicated over the corn and calluses two times in a day. The therapeutic activity of acidic and corrosive forms were examined for corns under the control of the dermatologist. Twice daily applications and weekly physician's assessment inclusive of the patient's perspective and including photography constitutes the treatment protocol. Table 1 represents the profile of the patients and places and numbers of lesions and the formulatios applied.

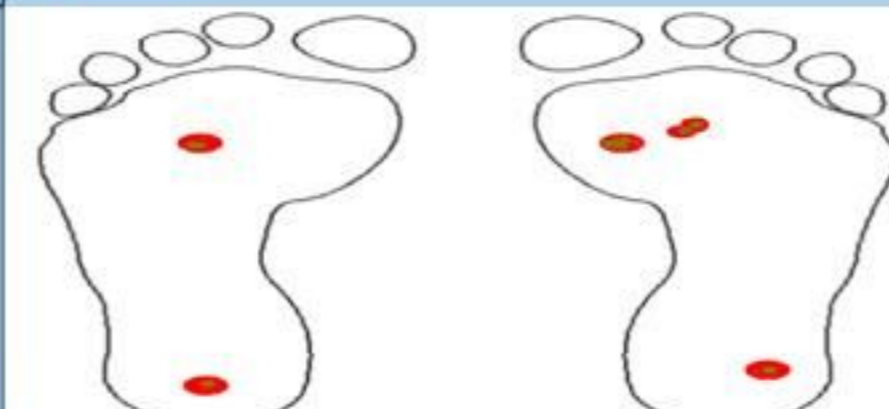
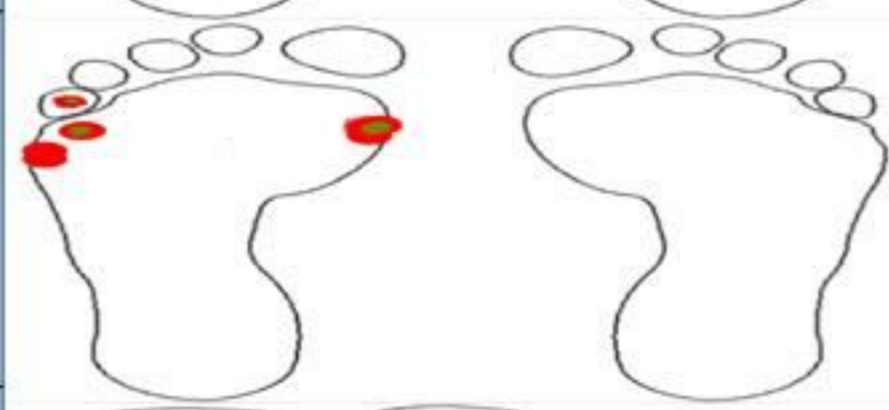


**Table 1 Patient and treatment profiles of corns and calluses**

Sex / Age	Place and number of lesions	1 <sup>st</sup> week	2 <sup>nd</sup> week	3 <sup>rd</sup> week	4 <sup>th</sup> week	5 <sup>th</sup> week	6 <sup>th</sup> week	7 <sup>th</sup> week
M / 66	Base of R foot: 3	Sol. 10%	Sol. 10%	Sol. 10%	Sol. 15%	-	-	-
	Base of L foot: 5	Sol. 15%	Sol. 15%	Sol. 15%	Sol. 15%	-	-	-
M / 54	Base of R foot: 3	Sol. 15%	Sol. 20%	Gel 20%	Sol. 20%	Sol. 30%	Gel 30%	Gel 30%
	R foot lateral of 5 <sup>th</sup> toe	Sol. 15%	Sol. 20%	Gel 20%	Sol. 30%	Sol. 30%	Gel 30%	Gel 30%
F / 37	L foot lateral of 5 <sup>th</sup> toe	Sol. 15%	Sol. 15%	Gel 15%	Gel 15%	Sol. 15%	-	-
F / 39	Base of R foot: 2, R 5 <sup>th</sup> toe	Sol. 15%	Gel 15%	Sol. 15%	Gel 15%	Sol. 30%	Gel 30%	-
	Base of L foot: 2, L 5 <sup>th</sup> toe	Sol. 15%	Gel 15%	Sol. 15%	Gel 15%	Sol. 30%	Gel 30%	-

M: Male, F: Female, R: Right, L: Left, Sol: Solution

## RESULTS:

A total of 19 lesions on 4 patients were followed up. All lesions were typical calluses of the foot. One patient (4 lesions) was started on 10 % solution, the remaining cases were initially given 15 % solution due to the observation of no improvement with 10 % solution. The formulation was well tolerated and 15 %-20 % forms were found to be effective. The most effective treatments were gained by formulation 30 %. No adverse effects were observed during treatment. Table 2 represents the treatment period and response according to the physician observation weekly.

Sex / Age	Places and numbers of lesions	1 <sup>st</sup> week	2 <sup>nd</sup> week	3 <sup>rd</sup> week	4 <sup>th</sup> week	5 <sup>th</sup> week	6 <sup>th</sup> week	7 <sup>th</sup> week
M / 66		0	0	0	+	-	-	-
		+	+	++	++	-	-	-
M / 54		+	+	+	+	++	++	+++
		+	+	+	+	++	++	+++
F / 37		+	+	++	++	+++	-	-
F / 39		+	+	++	++	+++	+++	-
		+	+	++	++	+++	+++	-

Physician comments about responses

0: No recovery was observed, +: A little response, ++: Response was observed, +++: Recovery was observed



The photographs exhibits the recovery period of M/54 during 7 weeks.

Recovery periods were different from patient to patient. Treatments depended on the resistance of corns and calluses and the concentration of formulations. The photographs below demonstrate the recoveries according to applications

Before Treatment    After Treatment    Before Treatment    After Treatment    Before Treatment    After Treatment



## CONCLUSION:

Patients welcome this new corn medicine formulation. Compared with other treatment modalities such as cryotherapy and surgery an effective topical formulation for calluses is bound to be of preference. According to four patients there were no specific preferences between gel and solution forms. Furthermore patients expressed that their achings were decreased during recovery period.

## ACKNOWLEDGEMENTS

Special acknowledges to Dr.Nagehan Saniç and Eylem Yilmaz due to their helps applying formulations and keeping up with patients during two months.

## REFERENCES

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