

# EVALUATING THE EFFICACY AND SAFETY OF TRANEXAMIC ACID TO HYDROQUINONE AND TRIPLE COMBINATION CREAM IN THE TREATMENT OF MELASMA

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| INFO ARTIKEL                                                                                               | ABSTRACT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| <p><b>Keywords:</b><br/> Melasma; Trane amic Acid;<br/> H droq inone; Triple<br/> Combina ion Therap .</p> | <p><i>Backgro nd: Melasma is an acq ired skin condi ion charac eri ed b sporadic h perpigmen ed mac les or pa ches ha affec s pho o e posed areas hich occ r chronicall . Melasma serio sl impairs a pa ien s q ali of life. C rren rea men s for melasma incl de h droq inone, cor icos eroids, re inoids, na ral s bs ances, and riple combina ion creams (TCC), hich demons ra e ariable efficac and side-effec profiles. Melasma can no be rea ed i h rane amic acid (TA), a ell-kno n an i-fibrinol ic dr g. Oral, opicall applied, and proced ral echniq es ere sed o adminis er TA. P rpose: This re ie e al a es he efficac and safe of rane amic acid o h droq inone and riple combina ion cream in he rea men of melasma and s gges s s eps ha need o be aken o mains ream TA se in clinical se ings. Re ie : Among he recen melasma rea men s are h droq inone (HQ), riple combina ion opicals, and reg lar se of broad-spec r m s nscreen. .I Beca se plasmin has been sho n o ha e melanogenic proper ies, rane amic acid (TA) is an essen ial herap op ion for melasma d e o i s an i-plasmin (and conseq en l an i-fibrinol ic) proper ies. Recen research has sho n ha melasma-affec ed skin has enhanced asc lari and VEGF e pression in he epidermis, s gges ing e ano her me hod b hich TA ma rea melasma clinicall . Concl sion: The re ie re ealed ha a combina ion of rane amic acid and h droq inone has be er efficac in rea ing melasma ra her han h droq inone alone. Oral rane amic acid combined i h TCC can pre en rec rrence and s s ain he o come.</i></p> |

In d c i n



## Research Method

## Result and Discussion

Among the recent melasma treatments are hydroquinone (HQ), triple combination topicals, and the regular use of broad-spectrum sunscreen .

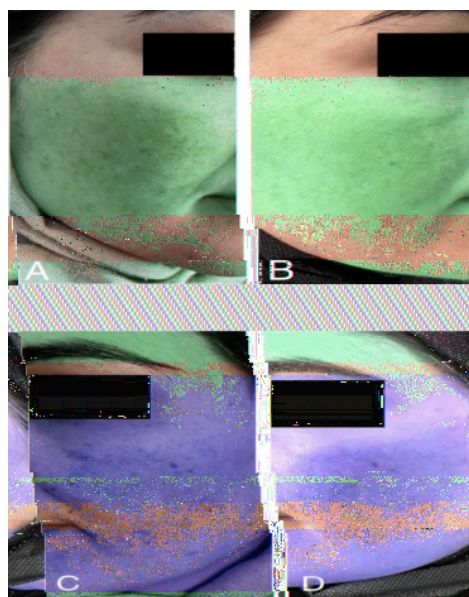








**Figure 1. Melanin content in TA+HQ group, before (baseline) and after (3 months in treatment). a) 33-year-old, b) 37-year-old**



**Figure 2.** Right side before treatment, b) after 8 weeks of treatment with TA+HQ. c) Left side of face before treatment, d) after treatment with TA in dermal + HQ



**Figure 3.** Melasma treatment results in (a) 4% of HQ cream, before treatment (left) and after 16 weeks of treatment (right); (b) TA in dermal + 4% hydroquinone cream

**T a n e a m i c      A c i d      V e      T i l e**  
**C m b i n a i n C e a m**

**Table 2**  
**T ane amic Acid c m a e d T i l e C mbina i n C eam**

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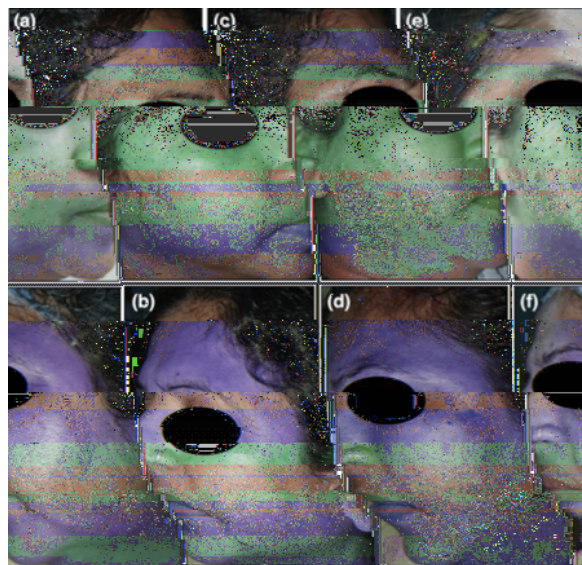
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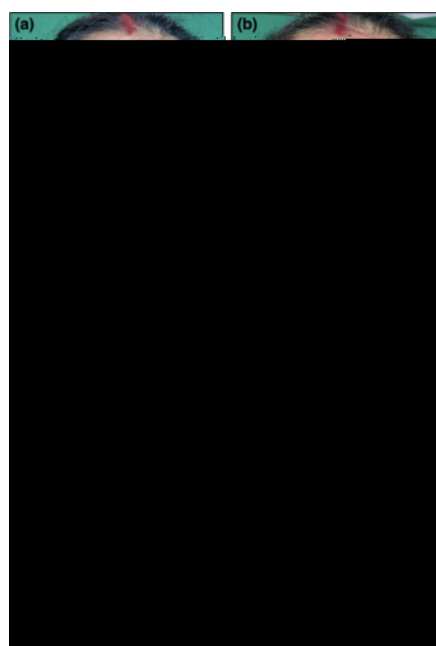
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**Figure 4.** Improvement in patients treated 250 mg of TA twice a day + fTCC. (a,b) baseline: mMASI = 15.6; (c, d) 4<sup>th</sup> week: 7.5 (51.9%), (e, f) 8<sup>th</sup> week: 5.1 (67.3%)



**Figure 5. Improvement in a patient treated with lactic acid + fTCC. a) baseline: mMASI = 3.6; (b) 4<sup>th</sup> week: 1.8 (50%); (c) 12<sup>th</sup> week: 1.2 (67%); (d) 24<sup>th</sup> week: 1.2 (67%)**

## CONCLUSION

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