

Format: Abstract ▾

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Comparative study of the effect of tocotrienols and -tocopherol on fasting serum lipid profiles in patients with mild hypercholesterolaemia: a preliminary report.

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Abstract

OBJECTIVES: Hypercholesterolaemia is a risk factor for cardiovascular diseases. Tocotrienols reportedly possess hypocholesterolaemic activity. This study examined the effect of tocotrienols (T3) in TOCOVID™ Suprabio™ on serum lipids. Patients and Methods :A randomised (2:1), open-label study of patients with mild hypercholesterolaemia ($= 5.18\text{mmol/L}$ to $<7.77\text{mmol/L}$) and one additional cardiovascular risk factor was carried out. Subjects received either tocotrienols (as TOCOVID™ Suprabio™) ($n=28$) or vitamin E (α-tocopherol) 500mg daily ($n=16$). Fasting lipids were compared at baseline and after 4 weeks therapy.

RESULTS: Following 4 weeks therapy, mean $\pm$ SD total cholesterol declined significantly in the tocotrienol group (from 6.10 ± 0.66 to 5.47 ± 1.16 ; $P=0.02$) compared to the α-tocopherol group (from 5.92 ± 0.52 to 5.47 ± 0.76 ; $P>0.05$). Mean LDL-C levels (mmol/L) were also significantly reduced in the tocotrienol group (3.82 ± 0.85 to 3.24 ± 1.26 ; $P=0.04$), but not in those on α-tocopherol (3.84 ± 0.75 to 3.28 ± 0.94 ; $P>0.05$). There were no significant changes in HDL-C and triglycerides in both groups. The tocotrienol group experienced a net decline in TG ($7.1\pm 31.4\%$; $P>0.05$) while the α-

tocopherol group had a net increase at week 4 (38.6+/-61.7%; P>0.05).

CONCLUSION: The study adds to existing evidence of the favourable effect of tocotrienols on total cholesterol and LDL-C. However, the results need further evaluation.

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MeSH terms, Substances



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