

Diagram of Changes in (1) LVM and (2) LVMI

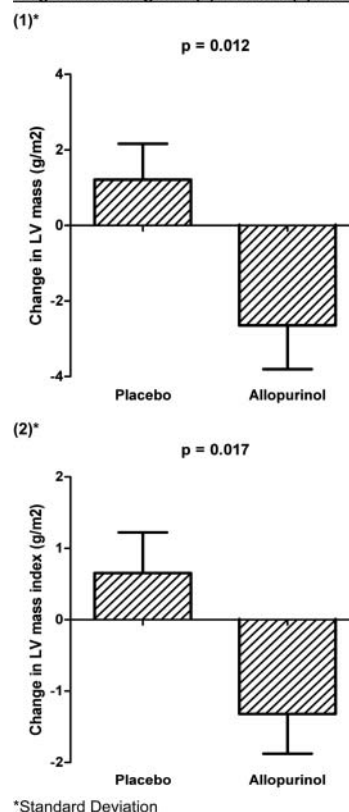


Figure 1

allopurinol reduces OS. We therefore investigated whether allopurinol regresses LVH in patients with T2DM.

Methods We conducted a randomised, double blind, placebo controlled study in 66 T2DM patients with echocardiographic evidence of LVH. Allopurinol 600 mg/day or placebo was given for 9 months over the study period. The primary outcome was reduction in left ventricular mass (LVM) as calculated by cardiac MRI at baseline and at 9 months follow-up. The secondary end-points were change in flow mediated dilatation (FMD) and augmentation index (AIx).

Results Allopurinol significantly reduced absolute LVM (-2.65 ± 5.91 g and placebo group $+1.21 \pm 5.10$ g ($p=0.012$)) and LVM indexed to body surface area (-1.32 ± 2.84 g/m² and placebo group $+0.65 \pm 3.07$ g/m² ($p=0.017$)).

No significant change was seen in both FMD and AIx.

Conclusions Allopurinol regresses LVM in patients with T2DM and LVH. Regressing LVH has been shown previously to improve CV mortality and morbidity. Therefore allopurinol may be a useful therapy to reduce CV events in T2DM patients with LVH.

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ALLOPURINOL REDUCES LEFT VENTRICULAR MASS IN PATIENTS WITH TYPE 2 DIABETES AND LEFT VENTRICULAR HYPERTROPHY

B R S Szejewski,¹ S G Gandy,² S R Rekhraj,² G H Houston,² C C L Lang,¹ J G George,¹ A D M Morris,¹ A D S Struthers¹ ¹University of Dundee; ²Department of Clinical Radiology, Ninewells Hospital and Medical School

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Introduction Left Ventricular Hypertrophy (LVH) is common in Type 2 Diabetes (T2DM) and contributes to their high cardiovascular (CV) event rate. LVH can be related to oxidative stress (OS) and