G-CP-7

Left Ventricular Mass is Related to Blood Pressure and Body Weight

BMY Cheung, HF Tse, CR Kumana, CP Lau.  
University Department of Medicine, University of Hong Kong, Queen Mary Hospital, Hong Kong.

Background: Left ventricular hypertrophy (LVH) is one of the most potent predictors of cardiovascular events. We sought to identify the factors determining left ventricular mass (LVM).

Methods: Sixty patients (M:F, 29:31; age 44 ± 11 yrs) with untreated mild essential hypertension (139± 12/94± 7mmHg) were studied. LVM was determined by echocardiography.

Results: LVM is higher in men than women and increases with age. LVM correlates with diastolic blood pressure (DBP) and body weight (BW) after controlling for sex and age. Multiple regression analysis shows that 54% of the variance in LVM is explained by BW (beta=0.59, p<0.001), sex (beta=0.34, p=0.001), age (beta=0.29, p=0.004) and DBP (beta=0.24, p=0.02). BW, body mass index, body surface area, waist circumference, waist-hip ratio, body fat percentage are all inter-related. Each of these is also significantly related to LVM.

Conclusions: The increase in LVM with age is a reflection of the rise in blood pressure with age and the duration of hypertension. The strong association between age, BW and waist circumference to LVM may help to explain why these simple parameters are powerful predictors of cardiovascular risk. To prevent or reduce LVH, the modifiable factors are mainly blood pressure and obesity. Weight reduction depends on rigorous lifestyle changes but is potentially the most effective form of therapy. However, control of blood pressure using the range of effective antihypertensive drugs available might be the more practical option.

G-D-1

The Effectiveness of Wet Wrap Dressings Using 0.1% Mometasone Furoate and 0.005% Fluticasone Propionate Ointments in the Treatment of Moderate-to-Severe Atopic Dermatitis in Children

Ann YS Pei, Henry HL Chan, KM Ho.  
*Department of Paediatrics, The Chinese University of Hong Kong, Hong Kong; Division of Dermatology, Department of Medicine, The University of Hong Kong; Chai Wan Social Hygiene Clinic, Department of Health, Hong Kong.

Different types of dressings have been used successfully in the treatment of atopic dermatitis. In this study, we looked at the efficacy of two newer topical steroids when applied under wet wrap dressings in the treatment of refractory atopic dermatitis in children. Forty children with a moderate-to-severe case of the disease were randomised to receive either tenth strength diluted 0.1% mometasone furoate ointment or tenth strength diluted 0.005% fluticasone propionate ointment. These were applied once daily over four weeks without wet wraps, or for two weeks without wet wraps followed by two weeks of application under wet wraps. There was a two-week run-in period for all patients when the topical treatment was standardised. At weekly follow-ups, patients were assessed by a single-blinded observer and objectively scored for disease extent and severity. A subjective score was also given for the impact of eczema on daily living. There was significant improvement in the disease severity from the baseline during the first two weeks of the open application arm (p = 0.043), however, additional beneficial effects were limited after week two. Wet wraps further improved the disease severity and extent after week two (p < 0.05), and were well tolerated. We concluded that both 0.1% mometasone furoate and 0.005% fluticasone propionate ointments are effective in the treatment of atopic dermatitis, and that wet wraps are useful in further improving refractory disease in children.