LDL cholesterol, HDL cholesterol, or C-reactive protein. Importantly, sCD40L was not linked with the prevalence of coronary artery calcification, aortic plaque or with coronary artery calcium scores.

The authors conclude that sCD40L will not be a useful marker for subclinical atherosclerosis in the general population.

Claire Braybrook

Original article de Lemos JA *et al.* (2005) Associations between soluble CD40 ligand, atherosclerosis risk factors, and subclinical atherosclerosis: results from the Dallas Heart Study. *Arterioscler Thromb Vasc Biol* 25: [doi: 10.1161/01.ATV.0000182904.08513.60]

Measuring carotid plaque volume to evaluate treatments for atherosclerosis

Use of 3D ultrasound to measure the volume of carotid plaque could be suitable for evaluating new treatments for atherosclerosis, an initial trial with atorvastatin has shown.

Previous studies carried out at the Robarts Research Institute in Canada have shown that carotid plaque area is a strong predictor of future cardiovascular events, including myocardial infarction and stroke.

In their recent study, Ainsworth *et al.* investigated whether transcutaneous carotid 3D ultrasound could detect the effects of atorvastatin treatment on the progression of atherosclerosis. Thirty-eight patients with carotid stenosis participated in this double-blind trial, and were randomly assigned to receive either 80 mg atorvastatin daily ($n=17$) or placebo ($n=21$). Ultrasound scans of patients' carotid arteries were carried out at the start of treatment and at 3-month follow-up visits, with plaque volumes calculated using a 3D Quantify software program. Over 3 months, carotid plaque volume significantly decreased in patients receiving atorvastatin compared with those receiving placebo, showing that this technique could be used to evaluate antiatherosclerotic therapies.

Studies involving alternative methods for assessing the degree of atherosclerosis, for example the measurement of coronary calcification and carotid intima-media thickness, are limited by long treatment regimens and the need for large sample sizes. The small number of patients in this study and its relatively short

duration highlight potential advantages of measuring the volume of carotid plaque in future trials evaluating new treatments.

Claire Braybrook

Original article Ainsworth CD *et al.* (2005) 3D ultrasound measurement of change in carotid plaque volume. A tool for rapid evaluation of new therapies. *Stroke* [doi: 10.1161/01.STR.0000178543.19433.20]

Reduced salt intake lowers blood pressure and urinary protein in black patients with hypertension

Black ethnic groups are more susceptible to high blood pressure than other populations and are consequently at increased risk of stroke, heart failure and kidney disease. Salt intake is known to be associated with high blood pressure and cardiovascular events, and recent studies have implicated PROTEINURIA as an independent risk factor for cardiovascular mortality. Swift *et al.* carried out the first double-blind, placebo-controlled, crossover study in a small group of black, nondiabetic patients with hypertension but not on antihypertensive therapy, to test whether reducing salt intake could lower their blood pressure and reduce urinary protein excretion.

After 4 weeks on their usual diet, patients reduced their dietary salt intake for 2 weeks. They then received, in turn, either slow-release sodium tablets to return their salt intake to normal levels, or placebo tablets to maintain low sodium levels, for 4 weeks each. Blood pressure was measured at the end of each of these periods. Patients on placebo exhibited a fall in urinary sodium excretion equivalent to a reduction of ~5 g (~50%) in daily salt intake, compared with those taking sodium tablets. This produced a significant fall in blood pressure ($P<0.01$) and a significant 19.4% reduction in urine protein excretion ($P=0.008$).

Consequently, the authors recommend that simple, clear advice be given to black patients with hypertension, to aid a reduction in salt intake to WHO recommended levels (≤ 5 g/day). This could help prevent cardiovascular and renal disease in the black population. They speculate that similar results could be achieved in other ethnic groups.

Pippa Murdie

Original article Swift PA *et al.* (2005) Modest salt reduction reduces blood pressure and urine protein excretion in black hypertensives: a randomized controlled trial. *Hypertension* 46: 308–312

GLOSSARY

PROTEINURIA

Excessive excretion of protein in the urine