	HIV + patients (n = 23)	Controls $(n = 30)$	p-value
Mean age (y):	$42 \pm 8$	$56 \pm 12$	0.0001
Male/female: n (%)	14/9 (61/39)	17/13 (57/43)	N/S
Coronary risk factors: n (%)			
Smoking	16 (70)	10 (33)	0.02
Diabetes mellitus	1/23 (4)	8/30 (27)	0.03
Hypertension	7/23 (30)	24/30 (80)	0.0006
Total cholesterol (mmol/l)	$3.7 \pm 1.1$	$4.8 \pm 1.3$	0.001
LDL cholesterol (mmol/l)	$2.3 \pm 1.0$	$3.2 \pm 1.0$	0.004
HDL cholesterol (mmol/l)	$0.8 \pm 0.3$	$1.1 \pm 0.4$	0.0014
Triglycerides (mmol/l)	$1.3 \pm 0.9$	$1.2 \pm 0.4$	N/S
BMI (kg/m²)	$25 \pm 5$	$29 \pm 5$	0.04
Angiographic findings: n (%)			
No of angiograms performed	22	27	
Single-vessel disease	16 (73)	12 (44)	0.04
Thrombus in an angiographi-	8 (37)	2 (7)	0.03
cally normal vessel			
Mean no of vessels involved	$1.3 \pm 0.6$	$1.7 \pm 0.8$	N/S
Culprit vessel: LAD	16 (73)	12 (44)	N/S
Culprit vessel; RCA/circumflex	6 (27)	15 (56)	N/S

Conclusion: HAART-naïve HIV-positive patients with ACS were younger and had fewer traditional coronary risk factors than HIV-negative patients. HIV-positive patients had more single-vessel disease, most commonly involving the left anterior descending coronary artery. The angiographic appearance of thrombus in an otherwise normal-appearing artery may imply a primary abnormality of coagulation or endothelial dysfunction in the pathogenesis of ACS in these patients.

## THE HEALTH-RELATED OUTCOME OF POST-STROKE VICTIMS RESIDING IN OLDER-ADULT HOMES IN THE MANGAUNG MUNICIPALITY AREA

J Esser, H van der Merwe, <u>J Botha</u>, J Laing, WF Mollentze, G Joubert

Departments of Internal Medicine and Biostatistics, University of the Free State, Bloemfontein

### POSTER PRESENTATION

The purpose of this study was to measure the health-related outcome of post-stroke older-adult victims residing in older-adult homes in the Mangaung municipality during June/July 2005. In this interviewer-administered descriptive study, measurements of post-stroke impairment were made with the stroke impact scale version 3 (SIS).

One hundred and two participants were included (response rate 97.1%), 27% were proxy responses and 72% self answered. Patients were mainly male (66%) and white (68%). The median age was 74.9 years (range: 50.1–97.0). With respect to stroke risk factors, 60.8% suffered from hypertension, 42.1% were current or previous smokers, 21.6% had been diagnosed with hypercholesterolaemia and 14.7% with diabetes mellitus. SIS median scores out of 100 for each domain were: strength 37.5, hand function 17.5, activities of daily living 45.0, mobility 36.1, communication 75.0, memory 67.9, emotion 63.9, social participation 43.8, and stroke recovery 50. Proxy-reported results regarding all domains were lower than that of self-reported results, with emotion showing the smallest difference.

The study showed that physical ability is a third of what it was before the strokes; mobility and activities of daily living about half. The mental and psychological domain seemed more resilient to the impact of stroke. Specific groups within the study population could also be identified that differed substantially from the norm and more detailed attention ought to be given to their specific conditions.

# RENAL FUNCTION AND URINARY MICROALBU-MIN EXCRETION IN SOUTH AFRICAN PATIENTS WITH MILD-TO-MODERATE HYPERTENSION

GP Candy, EN Libhaber<sup>1</sup>, M Lawson<sup>2</sup>, E Tshele<sup>1</sup>, JD

Esser<sup>3</sup>, JA Staessen<sup>4</sup> and P Sareli<sup>1</sup> Departments of Surgery, <sup>1</sup>Cardiology and <sup>3</sup>Nuclear Medicine, CH-Baragwanath Hospital; <sup>2</sup>Department of Medical Physics, University of the Witwatersrand; <sup>4</sup>University of Leuven, Belgium

Introduction: Urinary microalbumin excretion (UAE) is a marker of glomerular damage and diffuse target-organ damage. It is an independent predictor of poor prognosis in cardiovascular disease, including hypertension. UAE correlates with both ambulatory and clinical blood pressures in Caucasians but it appears to be uncertain whether these same correlations hold true in African patients with hypertension.

Aims: To determine the relationships between blood pressure measures, renal function and microalbumin excretion in South African patients with mild-to-moderate hypertension.

Methods: Patient recruitment and methods of clinic and ambulatory blood pressure monitoring (ABPM) have been reported previously. UAE was determined from 24-hour collections and glomerular filtration rate (GFR) calculated from<sup>51</sup> Cr-EDTA clearance. SAS 9.1 was used to determine correlations.

**Results:** Table 1. Patient demographics and correlations

	Parameter		Correlations	;
	(mean ±			UA/creati-
n = 185	SD)	GFR (r)	<i>UAE (</i> r)	nine ratio (t)
Age (years)	$53 \pm 10$	-0.415***	0.002	0.060
Male/female (n/n)	34/151	***	_	_
Clinic pressure: SBP (mmHg)	$172 \pm 20$	-0.172*	0.176*	0.212*
DBP (mmHg)	$102 \pm 8$	-0.116	0.078	0.153*
Daytime ABPM: SBP (mmHg)	$154 \pm 14$	-0.190*	0.171*	0.193*
DBP (mmHg)	$102 \pm 7$	-0.126	0.230**	0.221**
GFR (ml/min/1.73 m <sup>2</sup> )	$82 \pm 19$		-0.061	-0.120
UAE (mg/24 hours)	$17 \pm 21$	-0.061	-	-
UA/creatinine ratio (mg/µmole)	$2.3 \pm 3.1$	-0.120	_	_
p < 0.05; *p < 0.005; **p < 0.005; ***p < 0.005; **p <	.0005,			

In women, particularly those previously untreated for hypertension, UAE and the UA/creatinine ratio correlated with ABPM (p > 0.05), but not with clinic pressures.

**Conclusions:** Clinic SBP pressures correlated as well as ABPM pressures with UAE, the UA/creatinine ratio and GFR.

# EFFECT OF ERADICATION OF HELICOBACTER PYLORI ON BLOOD PRESSURE: STUDY AND PRELIMINARY RESULTS

<u>GP Candy</u>, M Lawson', GJ Oettle, A Kola', BH Modi' Departments of Surgery and 'Medical Physics, University of the Witwatersrand; 'Johannesburg Medical Centre, Jeppe Street, Johannesburg

#### POSTER PRESENTATION

Studies have demonstrated associations between cardiovascular disease and *Helicobacter pylori* infection. One Italian study found a blood pressure decrease following eradication of the infection in patients with mild hypertension. *H pylori* is endemic in black South Africans, a group at excess risk for cardiovascular disease. In culture, *H pylori* rapidly depletes arginine, the nitric oxide (NO) precursor. Supplementation with arginine mediates vasodilation and improves outcome in various cardiovascular diseases, including heart failure. We hypothesised that *H pylori* infection limits the availability of arginine (and NO) and may influence cardiovascular disease, including hypertension.

Methods: Black South African hypertensive patients [mean daytime ambulatory (ABPM) SBP > 140 mmHg; DBP > 85 mmHg] and a positive '4 C-urea breath test were randomised to either placebo or conventional quadruple (two antibiotics, PPI and bismuth) therapy for one week (routine duration at time of design of study). ABPM was repeated at follow-up visits (up to 10 weeks).