

Comparaison of the cardiovascular complications in the hypertensive black versus white populations of the oasis of the Algerian Sahara.

A. Bachir Cherif¹, A. Taleb¹, S. Benkhedda², A. Benetos³, A. Chibane⁴, M. Temmar⁵, MT. Bouafia¹

¹Cardiology Department University hospital of Blida, Algeria. ²Cardiology Department. University hospital Mustapha, Algeria.

³Geriatric department University hospital of Nancy, France. ⁴Cardiology Department University hospital of Ain Taya, Algeria.

⁵Cardiology Center Ghardaïa . Algeria

OBJECTIVE:

To compare morphometric and hemodynamic profile, and cardiovascular complications of the black population of Algerian Sahara with that of the white population of the same oasis.

DESIGN AND METHODE:

656 black and 758 white subjects of the two sexes, aged 40 and over, were re-examined after 6 years of decline, in terms of developments of myocardial infarction, heart failure, stroke, and the number of hospitalizations and mortality.

The study consisted of a questionnaire focused on civil status, target organ damage, the number of hospitalization and mortality, supplemented by a clinical examination including morphometry, measurement of the arterial pressure with validated electronic device (OMRON 705CP).

Laboratory tests sought a carbohydrate and lipid metabolic

disorder. In case of death, a collection of the cause of death was made after consulting the medical records in case of death in hospital, and family survey for death at home or elsewhere.

RESULTS:

58% of male and 46% of female subjects were included, with a mean age of 54.5 ± 12 years. For the overall population, mean systolic blood pressure was 150 ± 25 mmHg, and diastolic 88 ± 13 mmHg.

The prevalence of hypertension was significantly higher among blacks than whites, 61.3% versus 53.4% ; with a longitudinal incidence of 18.6% among blacks versus 12.4% for whites.

Among blacks, the incidence of stroke, myocardial infarction and heart failure was respectively 5.8%, 3.4% and 2.3%.

In hypertensive patients, the mortality rate was significantly

higher among blacks, 14.5%, versus 6% for whites, regardless of gender.

For the overall hypertensive population, the blood pressure goal (<140 and / or 90 mmHg) was achieved only 18% of cases.

CONCLUSION :

In the black population of the Oasis of the Algerian Sahara, arterial hypertension is highly prevalent, with blood pressure level significantly higher than in the white population.

Stroke is its dominant complication, particularly among women. Specialized care facilities must be consistent in place for the management of these patients.