

## Personality Disorders and Atherosclerotic Plaque

### To the Editor

I have read with interest the article by Suárez-Bagnasco et al. (1) The relationship between personality disorders and the presence of coronary plaques detected by multislice computed tomography highlight a positive association between the number of disorders and the presence of more coronary risk factors (CRF). This association involves pathophysiological mechanisms with predominant sympathetic discharge which have negative effects on the cardiovascular system of patients diagnosed with these disorders. As indicated by the authors, this study helps to explain personality disorders as factors favoring the adoption of unhealthy behaviors and habits which would have a direct impact on adherence to preventive measures and treatment. However, taking into account the current difficulties in accessing to complex studies to detect coronary lesions, I think it would be very important to identify personality disorders by internationally validated screening and promptly work together with psychosocial areas to achieve a more effective CRF control in these patients, in whom the largest number of calcified (and non-calcified vulnerable) plaques has been found. This type of action can be implemented and extended in different socioeconomic strata. I congratulate the authors for a very interesting contribution to cardiologists, clinicians and general practitioners in the approach to cardiovascular prevention.

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### Authors' reply

The work "Personality disorders and coronary atherosclerotic plaque" (1) is a first approach to study this topic. We think it is desirable to perform further studies and include larger samples of different socioeconomic levels.

The personality disorders assessed in our study, following the international diagnostic criteria used by mental health professionals, are not included in the psychosocial risk factors considered in the current guidelines on cardiovascular disease prevention. (2, 3)

The latest cardiovascular prevention guideline published in 2012 by the European Society of Cardiology (2) considers the following psychosocial risk factors:

low socioeconomic status, low social support, stress at work, family life stress, depression, anxiety, hostility and the tendency to experience negative emotions and social inhibition (known in the literature as Type D personality). This guideline recommends evaluating these psychosocial risk factors with Class IIa and Level of evidence B, and indicates intervention with Class I and IIa and Level of evidence A.

In the case of coronary diseases whose fundamental pathophysiological basis is coronary atherosclerotic lesions, there is evidence of early fatty streaks in human fetuses of hypocholesterolemic mothers. (4) In children, adolescents and young adults, the number of cardiovascular risk factors and age increase the probability of presence, extent and severity of atherosclerotic lesions. (4) In addition, the family psycho-socio-economic situation can also contribute to the development of lesions and may even intensify psychological vulnerability of those who already have a vulnerable temperament. (5)

Based on the above, cardiovascular prevention seems necessary in different age groups and life stages, to control and modify cardiovascular and psychosocial risk factors, as well as to promote the development of bio-psychosocial protective factors.

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## Aortic Stenosis in a Patient with Werner's Syndrome and Addison's Disease

### To the Editor

Werner's syndrome (WS) is a rare autosomal recessive disorder caused by an abnormal WRN gene (1), characterized by premature aging similar to progeria, with an average life expectancy of 47 years. The most common causes of death are cancer and myocardial infarction or stroke, secondary to generalized early atherosclerosis. (2) WS also manifests with skin conditions such as scleroderma, ulcers, premature cataracts and leucotrichosis, short stature, liver cirrhosis, esophageal varices and different endocrinological disorders. (2) Although the advancement of medicine has extended life expectancy of patients with WS through a more appropriate management of atherosclerotic disease risk factors and early diagnosis of malignant tumors, there is little information on degenerative calcified aortic stenosis associated with age. (3-6)

We report the case of a 59-year-old female with WS and symptomatic aortic stenosis. One of her parents was affected by WS. The patient was on chronic treatment with steroids due to primary adrenocortical insufficiency. She had been previously operated of a nonspecific thyroid carcinoma. At the time of admission the patient presented with scleroderma-like skin, bird-like facial features, short stature (155 cm), dark skin pigmentation, leucotrichosis and creatinine clearance <50 ml/min. Doppler echocardiography demonstrated a calcified aortic stenosis with mild insufficiency. Transaortic mean pressure gradient was 49 mmHg, calculated area of 0.7 cm<sup>2</sup> and pulmonary artery wedge pressure of 27 mmHg. The angiography showed normal coronary arteries and the aortogram revealed a small aortic annulus. An elective aortic valve replacement was performed. Intraoperative measurement of the aortic annulus showed slightly <

19 mm diameter. Annular enlargement with a bovine-pericardial patch was performed and a mechanical prosthetic valve (St. Jude Medical 19 mm) was inserted. The first 48 postoperative hours were uneventful, but then serum aminotransferases progressively increased, glomerular filtration deteriorated and the patient died from multi-organ failure six days later. Despite its poor outcome, we decided to report this rare case of a WS patient with prolonged survival who developed aortic stenosis. Since cardiovascular disease is a major cause of death in WS, aggressive surgical treatment to correct valve dysfunction should be considered in an attempt to prolong the lives of these severely ill patients.

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