Unicentric Castleman disease is a generally benign disorder that is usually classified as belonging to the hyaline vascular type. It is found in young adults, and most of the patients are asymptomatic. In contrast, the multicentric form is found in older adults and is usually associated with the plasma cell variant, a systemic disease with generalized lymphadenopathy, hepatosplenomegaly, fever, and night sweats; in addition, it is frequently associated with HIV infection.[2]

The treatment of choice of the unicentric form is surgical, and complete resection is curative in most cases. If the lesion cannot be resected completely, the prognosis with partial resection is also favorable, and the patient may remain asymptomatic for years. Other therapeutic options include preoperative embolization, radiotherapy, and chemotherapy. The experience with the use of rituximab in unicentric Castleman disease is limited, although there are reports of cases in which promising results were obtained in patients with unresectable disease or in whom partial resection was performed. In the multicentric form, surgical resection is not sufficient, and the association of radiotherapy and chemotherapy is necessary.[3]

Castleman disease is a rare disorder, the diagnosis of which requires a high degree of suspicion, due to the absence of specific clinical or radiological findings; the definitive diagnosis is based on the pathological study. It should be considered in the differential diagnosis of any mediastinal mass.[4]

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Safety and Efficacy of Endothelial Progenitor Cell Capture Stent in ST-Elevation Acute Myocardial Infarction. GENIA Study

Seguridad y eficacia del stent capturador de células progenitoras de endotelio en el infarto agudo de miocardio con elevación del ST. Estudio GENIA

To the Editor,

The Genous® stent (OrbusNeich, Fort Lauderdale, Florida, United States) is made of stainless steel coated with murine anti-CD34 monoclonal antibodies, an antigen present on the surface of endothelial progenitor cells. Because of this characteristic, circulating cells of this type are attracted to the stent and attach to the struts, resulting in prompt formation of a layer of functional endothelium in less than 2 weeks.[1] In a highly prothrombotic clinical situation such as ST segment elevation acute myocardial infarction (STEAMI), fast endothelialization of the stent could hypothetically reduce the risk of thrombosis and the need for new target vessel revascularization (TVR).

The aim of our study is to evaluate the safety and efficacy of the Genous® stent in patients with STEAMI undergoing primary angioplasty.

This is a prospective observational study carried out between June 2008 and July 2010, including 139 consecutive patients undergoing primary angioplasty with implantation of one or more Genous® stents. Patients who were hospitalized in cardiogenic shock, those in recovery from cardiac arrest, and patients with a formal contraindication for dual antiplatelet therapy for at least 1 month were excluded. The regimen for antithrombotic and anticoagulant therapy followed the recommendations of European guidelines for the management of acute myocardial infarction. Patients were followed up by telephone contact.

Cardiac death was defined as death due to a cardiac cause, an unknown cause, or a procedure-related cause. Clinical restenosis was established on the presence of anginal symptoms associated with >50% stenosis in the segment covered by the stent and the adjacent 5 mm.

The patients' baseline characteristics and the procedure-related characteristics are summarized in Tables 1 and 2.

All patients received dual antiplatelet therapy, which lasted for 1 year in 88 patients (65.2%). Mean follow-up was 538·(334.72) days. Five patients died during follow-up (3.6%): one death was due to noncardiac cause related to gastric neoplasm at 2 years following the procedure (cardiac mortality 2.9%, noncardiac mortality 0.7%), 2 patients died suddenly at home at 1 year and 2 years of follow-up, and 2 patients died during hospitalization (1 due to cardiac rupture and 1 due to cardiogenic shock and multiorgan failure).

Table 1
Baseline Characteristics of Patients With ST Segment Elevation Acute Myocardial Infarction Treated With a Genous® Stent

Age, years	64±13.5
Males	104 (74.8)
Smokers	67 (58.2)
Hypertension	69 (49.6)
Hyperlipidemia	66 (47.5)
Diabetes mellitus	24 (17.3)
Previous AMI	13 (9.4)
Chronic renal failure	10 (7.3)
Previous revascularization surgery	1 (0.7)
Previous PCA	14 (10.1)
Maximum TpI, ng/mL	93.1±87
Multivessel disease	28 (20.1)
Ejection fraction	52.3±10.8

AMI, acute myocardial infarction; PCA, percutaneous coronary angioplasty; TpI, troponin I.
Data are expressed as mean±standard deviation or no. (%).

Table 2
Procedure-Related Characteristics

Radial access	124 (89.2)
Culprit artery	
Anterior descending	52 (37.4)
Right coronary	66 (47.5)
Circumflex	20 (14.4)
Baseline TIMI	
TIMI 0-1	115 (82.7)
TIMI 2-3	24 (17.3)
Total lesion length, mm	22.6±8.7
Number of stents per patient	
1	106 (76.3)
2	28 (20.1)
3	5 (3.6)
Maximum lesion diameter, mm	3.1±0.4
Direct stent	75 (54)
Thrombus aspiration	80 (57.6)
Final TIMI	
TIMI 3	134 (96.5)
TIMI 1-2	4 (3.6)
No reflux	9 (6.5)
Angiographic complications[*]	18 (12.9)

TIMI, thrombolysis in myocardial infarction.
Data are expressed as mean±standard deviation or no. (%).
[*] Distal embolization, lateral branch occlusion, dissection, or perforation.

Based on the criteria of the Academic Research Consortium, there were 2 definite cases of thrombosis during follow-up (1.4%), one occurring during hospitalization and the other at 7 months following the procedure in a patient who had temporarily discontinued antiplatelet therapy.

Clinical restenosis occurred in 5% of cases, a new TVR was required in 5.8%, and target lesion revascularization (TLR) was needed in 3.8%.

Primary angioplasty is the treatment of choice in patients with STEAMI. Nonetheless, the choice of stent type remains controversial. Although it has been demonstrated that drug-eluting stents (DESs) effectively reduce restenosis, they can delay remodeling, a factor that has been related to thrombosis, particularly in high-risk situations, such as STEAMI.[2] In a study by Planas et al.,[3] 8.6% of the patient group treated with DESs required TLR, a higher rate than was documented in our study. This difference may be related to the fact that the patients in that study underwent angiographic follow-up studies at 6 and 12 months, which could increase the indication for coronary interventions.

Few studies have been performed with the Genous® stent in primary angioplasty. In the registry carried out by Lee et al.,[4] which contained 321 patients, definite thrombosis was reported in 0.9% and the total mortality rate was 5.8%. The most relevant finding of Lee's study was that there was no increase in the number of late thrombosis cases despite the use of dual antiplatelet therapy for 1 month. More recently, Low et al.[5] reported a binary restenosis rate of 28% and lumen loss of 0.82 mm in a study including 95 patients with angiographic follow-up at 6 and 12 months. These values are higher than those obtained in our study and, again, can be related to a higher indication for coronary interventions in patients under angiographic follow-up.

In a comparison with other devices used in STEAMI cases, a study by Chong et al.[6] showed that the Genous® stent was a comparable alternative to conventional stents and DESs; no significant differences were found in terms of TVR, non-fatal myocardial infarction, or long-term major cardiac events.

The Genous® stent seems to be a safe, effective option in STEAMI patients because of low associated rates of thrombosis and TLR. However, additional comparative studies with currently available devices are needed.

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Terminology Management for Implantable Cardiac Electronic Device Lead Macro-Dislodgement

Ordenación terminológica sobre macrodislocación de electrodos de dispositivos cardiacos electrónicos implantables

To the Editor,

Poor lead positioning of implantable electronic cardiac devices is rare and discovered incidentally on occasion, but can have serious complications.[1] Dislodgement of correctly positioned leads is common, however, and can be a significant source of clinical complications for patients with these devices. Lead dislodgement may be an incidental, asymptomatic finding in certain patients, while in others it can cause a wide range of clinical problems. These include extracardiac stimulation, inappropriate therapies by automatic defibrillators, syncope, and heart failure due to loss of cardiac resynchronization in patients with biventricular pacing, possibly leading to death from asystole in patients completely dependent on pacing.