## Table

Prevalence of Low Weight, Overweight and Obesity in the Spanish Adult Population by Age and Sex, Based on the EHSS from 2009 and 2014

			2009				2014	
Age (y)	n	Underweight, % (95%Cl)	Overweight, % (95%CI)	Obesity, % (95%CI)	n	Underweight, % (95%CI)	Overweight, % (95%Cl)	Obesity, % (95%CI)
Men								
18-39	3069	1.0 (0.7-0.4)	39.0 (37.3-40.7)	12.0 (10.9-13.2)	2784	1.3 (0.8-1.7)	36.8 (35.0-38.5)	10.7 (9.6-11.9)
40-59	3527	0.2 (0.1-0.4)	49.9 (48.3-51.6)	20.4 (19.1-21.7)	3936	0.5 (0.3-0.7)	46.9 (45.3-48.5)	19.1 (17.8-20.3)
60-79	2309	0.4 (0.2-0.7)	51.2 (49.2-53.3)	22.8 (21.1-24.5)	2630	0.5 (0.3-0.8)	51.0 (49.0-52.9)	23.4 (21.8-25.0)
$\geq 80$	498	1.4 (0.4-2.4)	48.4 (44.0-52.8)	17.9 (14.5-21.2)	674	0.7 (0.1-1.4)	47.6 (43.9-51.4)	18.7 (15.8-21.6)
Total	9403	0.6 (0.4-0.7)	47.0 (45.6-48.4)	18.5 (17.6-19.3)	10 024	0.7 (0.6-0.9)	45.1 (43.8-46.4)	17.8 (17.0-18.6)
Women								
18-39	3169	6.1 (5.2-6.9)	20.3 (18.9-21.7)	7.6 (6.7-8.5)	2889	5.5 (4.7-6.3)	19.2 (17.7-20.6)	9.5 (8.4-10.5)
40-59	3815	1.6 (1.2-2.0)	30.1 (28.6-31.5)	14.6 (13.5-15.7)	4116	2.3 (1.8-2.7)	28.3 (26.9-29.7)	14.6 (13.5-15.7)
60-79	2992	0.7 (0.4-1.0)	43.7 (41.9-45.5)	25.2 (23.7-26.8)	3079	1.3 (0.9-1.7)	39.7 (38.0-41.5)	24.9 (23.4-26.4)
$\geq 80$	855	2.9 (1.8-4.1)	37.7 (34.4-40.9)	22.3 (19.6-25.1)	1175	1.6 (0.9-2.3)	40.8 (38.0-43.6)	22.2 (19.8-24.6)
Total	10831	2.8 (2.4-3.1)	31.5 (30.4-32.5)	16.0 (15.3-16.8)	11 259	2.9 (2.6-3.2)	29.7 (28.7-30.7)	16.4 (15.7-17.2)
Both sexes								
18-39	6238	3.6 (3.1-4.0)	29.5 (28.3-30.6)	9.8 (9.0-10.5)	5673	3.4 (3.0-3.9)	27.8 (26.6-29.0)	10.1 (9.3-10.9)
40-59	7342	0.9 (0.7-1.2)	39.6 (38.5-40.7)	17.4 (16.5-18.3)	8052	1.4 (1.1-1.7)	37.4 (36.3-38.5)	16.8 (16.0-17.6)
60-79	5301	0.6 (0.4-0.7)	47.0 (45.6-48.3)	24.2 (23.0-25.3)	5709	1.0 (0.7-1.2)	44.9 (43.6-46.2)	24.1 (23.1-25.3)
$\geq 80$	1353	2.4 (1.6-3.2)	41.6 (39.0-44.2)	20.7 (18.5-22.9)	1849	1.3 (0.8-1.8)	43.3 (41.0-45.5)	20.9 (19.1-22.8)
Total	20234	1.7 (1.5-1.9)	38.8 (37.9-39.7)	17.3 (16.7-17.8)	21 283	1.9 (1.7-2.0)	37.1 (36.3-37.9)	17.2 (16.6-17.7)

95%CI, 95% confidence interval.

<sup>\*</sup> Direct age adjustment, taking the total population as standard.

this trend remains stable over time and whether it is the result of the effort of the sectors involved in public health to control cardiovascular risk factors.

Paula Acevedo,<sup>a,\*</sup> Ana Isabel Mora-Urda,<sup>a</sup> M. del Pilar Montero,<sup>a</sup> M. Dolores Cabañas,<sup>b,c</sup> Consuelo Prado,<sup>a</sup> and M. Dolores Marrodán<sup>b,d</sup>

<sup>a</sup>Departamento de Biología, Facultad de Ciencias, Universidad Autónoma de Madrid, Madrid, Spain

<sup>b</sup>Grupo de Investigación EPINUT, Facultad de Medicina, Universidad Complutense de Madrid, Madrid, Spain

<sup>c</sup>Departamento de Anatomía, Facultad de Medicina, Universidad

Complutense de Madrid, Madrid, Spain <sup>d</sup>Departamento de Zoología y Antropología Física, Facultad de

Biología, Universidad Complutense de Madrid, Madrid, Spain

\* Corresponding author:

E-mail address: paula.acevedo@uam.es (P. Acevedo).

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## Wolff-Parkinson-White Syndrome Associated With a Fistula Between the Right Atrial Appendage and Right Ventricle



Fístula entre orejuela auricular derecha y ventrículo derecho asociada a síndrome de Wolff-Parkinson-White

## To the Editor,

We present an exceptional case of Wolff-Parkinson-White syndrome associated with a right-sided accessory pathway (AP) at

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the level of a fistula between the right atrial appendage and right ventricle.

A 16-year-old patient with a history of palpitations with Wolff-Parkinson-White syndrome was referred for ablation (Figure 1A). There were no findings of structural heart disease on echocardiogram. A first electrophysiologic study confirmed a right-sided AP with a minimum RR interval in atrial fibrillation 200 ms and retrograde conduction via the AP with retrograde atrial activity earlier in the lateral tricuspid annulus. Several radiofrequency applications at this level failed to eliminate conduction. A second



**Figure 1.** A: electrogram prior to ablation. B: endocavitary recording in sinus rhythm, with the ablation catheter located in the right atrial appendage. The atrioventricular interval is very short at this level. Monopolar recording shows QS pattern. C: endocavitary recording with ventricular pacing. The ablation catheter is again located in the right atrial appendage. A very short ventriculoatrial interval can be seen at this level.

procedure failed despite a sheath being used to improve stability. For this reason, the patient was referred to another hospital. In the third electrophysiological study, the earliest atrioventricular activity was detected at the level of the right atrial appendage (Figure 1B). A new ablation procedure using an irrigated-tip radiofrequency catheter was unsuccessful. It was then suspected that the AP had an epicardial insertion originating in the right atrial appendage. For this reason, cardiac computed tomography

angiography was performed that showed a slightly dilated right atrium with an abnormal tubular-shaped connection between the right atrial appendage and the lateral basal portion of the right ventricle (Figure 2A). All other cardiac structures were normal. Given this finding, and after 3 unsuccessful endocardial ablation procedures, it was decided to refer the patient to another hospital with experience in treating arrhythmias in pediatric patients with minimally invasive surgery.<sup>1</sup> The right chest cavity was entered



**Figure 2.** A: 3-dimensional reconstruction of computed tomography angiography showing the fistula connecting the right atrial appendage with the basal portion of the right ventricle (arrow). B: surgical image showing the fistula after pericardiotomy (arrow). C: epicardial cryoablation (arrow).

via 3 small incisions in the submammary sulcus. This procedure was followed by video-assisted thoracoscopy and epicardial cryoablation of the AP in the tricuspid annulus (Figure 2B and Figure 2C). AP conduction was immediately eliminated. The patient was discharged from hospital at 48 hours with good prognosis.

The typical location for APs is in the endocardium close to the atrioventricular ring. The atrial or ventricular insertion is sometimes further away from this site. Less often, the location is epicardial and exceptionally involves cardiac abnormalities such as diverticulum or right atrial appendage fistula.<sup>2–5</sup>

Endocavitary catheter ablation is highly effective. Difficulties in ablation are associated with subsequent relapse. Three elements associated with difficulties in AP ablation have been described in the literature: atypical location, erroneous location of the insertion site, and technical difficulties in achieving ablation. In these situations, the combination of new electroanatomic mapping, x-ray mapping, and x-ray imaging techniques can be of immense help in correct diagnosis and treatment<sup>2,5,6</sup> which, in some cases, must be surgical. The surgical treatment of AP is well established and its usefulness has been proven. However, percutaneous ablation has confined the surgical approach to complex cases with mainly epicardial location.

We can see how the diagnosis and ablation of an AP can sometimes be a complex task. Imaging techniques such as cardiac computed tomography angiography can be very useful and should probably be performed more frequently, especially after failure of the initial approach. These techniques provide anatomical data that help in detecting and predicting difficulties in ablation procedures and thus in rethinking the approach. If surgery is needed, it is important to bear in mind the minimally invasive approach as a safe and effective option with excellent esthetic results (Figure of the supplementary material).

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#### SUPPLEMENTARY MATERIAL



Supplementary material associated with this article can be found in the online version available at http://dx.doi.org/10.1016/j.rec.2017.01.020.

Ignacio Roy,<sup>a,\*</sup> Virginia Álvarez,<sup>a</sup> José-Miguel Ormaetxe,<sup>b</sup> Jesús-Daniel Martínez-Alday,<sup>b</sup> Ramón Pérez-Caballero,<sup>c</sup> and Juan Miguel Gil-Jaurena<sup>c</sup>

<sup>a</sup>Departamento de Cardiología, Complejo Hospitalario de Navarra, Pamplona, Navarra, Spain

<sup>b</sup>Departamento de Cardiología, Hospital Universitario de Basurto, Bilbao, Vizcava, Spain

<sup>c</sup>Departamento de Cirugía Cardiaca Infantil, Hospital Gregorio Marañón, Madrid, Spain

\* Corresponding author: E-mail address: iroy.md@gmail.com (I. Roy).

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## Comparison of Bleeding Risk Scores in Patients With Nonvalvular Atrial Fibrillation Starting Direct Oral Anticoagulants



Comparación de escalas de riesgo hemorrágico en pacientes con fibrilación auricular no valvular que inician anticoagulantes orales de acción directa

### To the Editor,

We have read with interest the study by Riziq-Yousef Abumuaileq et al.<sup>1</sup> in which they demonstrate a similar predictive capacity for the HAS-BLED, ORBIT and ATRIA scoring systems for predicting bleeding complications in patients with atrial fibrillation (AF) being treated with vitamin K antagonists. However, the study that initially validated the ORBIT scoring system<sup>2</sup> showed it to be superior to the other 2 scoring systems. Based on these seemingly discordant results, and taking into account the increasing use of direct oral anticoagulants (DOACs), with its specific characteristics in our area, we consider the validation and comparison of these scoring systems to be clinically significant in patients in our environment starting treatment with DOACs. To this end, a retrospective study was conducted in 3 Spanish hospitals. Between January 2013 and December 2014, 973 consecutive patients with nonvalvular AF who started treatment with DOACs were included. Patients with an indication of temporary anticoagulation or different from AF and those with hypertrophic cardiomyopathy, moderate/severe rheumatic mitral stenosis, carriers of mechanical valvular prostheses or those already taking DOACs were excluded. The 3 bleeding risk scores (HAS-BLED, ATRIA and ORBIT) were calculated in 970 patients (99.7%). During the follow-up period (mean, 646 [470-839] days), bleeding complications were collected by reviewing electronic medical records and through telephone calls in 99.8% of the patients. Bleeding complications were classified according to the International Society on Thrombosis and Hemostasis criteria.<sup>3,4</sup>

The population characteristics are shown in Table. A total of 505 patients (51.9%) received rivaroxaban; 188 (19.3%) received dabigatran and 280 (28.8%) received apixaban. During the follow-up period, there were 101 clinically significant bleeding episodes (6.11/100 people/y), 47 major bleeding episodes (2.76/100 people/y), 40 significant gastrointestinal bleeding episodes (2.33/ 100 people/y), 25 major gastrointestinal bleeding episodes