SYNCOPE
CALL FOR THE MISSING DIAGNOSIS

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INTRODUCTION

Syncope is a common reason for emergency department (ED) attendance. This entity may be associated with significant morbidity and mortality and its differential diagnosis is not straightforward. Arrhythmic causes include tachycardia and bradycardia; the later may require pacemaker (PM) implantation. Many hospitals lack a dedicated syncope unit to approach these patients.

METHODS

Single-center descriptive analysis of patients that implanted a permanent PM in 2019. Additional information was collected in patients with ED visits in the 365 days that preceded the device implantation.

RESULTS

Table 1. Population that impanted PM in 2019 (n=398)

BASELINE CHARACTERISTICS	
Mean age (min-max)	79 years (20-100)
Male gender, n (%)	218 (55%)
Chronic kidney disease, n (%)	29 (7.3%)
Arterial hypertension, n (%)	320 (80%)
Diabetes mellitus, n(%)	107 (26.8%)
Dyslipidemia, n (%)	230 (57.5%)
INDICATIONS FOR PACING	
Complete AV block, n (%)	156 (41%)
Secong degree AV block, n (%)	105 (26%)
Sinus node dysfunction, n (%)	64 (16%)
Atrial fibrillation with slow ventricular conduction, n (%)	53 (13.5%)
Other indications , (%)	14 (3.5%)

Table 2. Patients with a previous ED visit (n=88)

Main complaint	
Syncope, n (%)	48 (54.5%)
Presyncope, n (%)	31 (35.2%)
Other, n (%)	9 (10.2%)
Initial triage area	
Medical, n (%)	64 (73%)
Surgical, n (%)	24 (27%)
Cranioencephalic trauma	26 (29.5%)
ECG in the ED, n (%)	59 (67%)
Observation by a cardiologist, n (%)	20 (23%)
Scheduled Cardiology appointment, n (%)	30 (34%)

MAIN FINDINGS:

- In 2019, a total of 398 patients were admitted for PM implantation, 55% male (n=218), 45% female (n=180), with mean age of 79 years.
- Regarding indications for pacing, 41% (n= 156) had complete atrioventricular (AV) block, 26% (n=105) had a second-degree AV block, 16% (n=64) had sinus node dysfunction and 13.5% (n=53) had atrial fibrillation with slow ventricular conduction.
- Twenty-two percent (n=88) of patients had a previous visit to the ED.
- Of these patients, only 67% (n=59) performed an electrocardiogram (ECG) and only 23% (n=20) were referred for observation by a cardiologist in the ED.
- Thirty patients (34%) had a scheduled Cardiology appointment by the time of discharge.

CONCLUSIONS

Our study describes a common problem in hospitals without dedicated syncope evaluation units. As all the patients implanted a PM, it is interesting to observe that almost 22% of these had a “warning” visit to the ED and 33% of the last did not get and ECG. This analysis highlights the need for a comprehensive and multidisciplinary approach of patients presenting with syncope and presyncope to promote early identification and treatment of arrhythmic causes, reducing patient morbidity and healthcare costs.