Introduction

Community-acquired culture-negative endocarditis is a rare entity poorly studied.

Objectives

We studied the clinical characteristics, in-hospital mortality, and short-term prognosis of patients with culture-negative endocarditis.

Methods

In total, 104 episodes of definite endocarditis according to duke criteria, were studied (2014–2019). We compared the clinical, laboratory, and echocardiography characteristics and the complications and survival rates of patients with culture-negative and culture-positive endocarditis.

Results

Culture-negative endocarditis occurred in 76/104 (73%) episodes. Compared with the culture-positive endocarditis patients, the time elapsed between first symptoms and admission was lower in patients with culture-negative endocarditis, a mean of 20 days vs 30 days in culture positive group (p < 0.05), and these patients also had lower C-reactive protein levels at admission (99 vs 120 mg/dl) (p < 0.05). in hospital stay was not different between the two groups with a mean of days of hospitalization of 27 days. However in-hospital mortality rates were higher in culture-negative versus culture-positive patients (15% vs 11% mortality rate) as for complication rates Severe sepsis and vascular complication (stroke, splenic infarction) were higher in the negative culture group with 7.9% vs 3.1% in the positive culture group p < 0.05.

Conclusions

Culture-negative endocarditis patients presented with lower levels of C-reactive protein at admission and required less time for hospital admission, however presented a higher rate of in-hospital mortality and complications compared to culture-positive endocarditis patients.

Conflict of Interest

None

Jennifer Laycock, Mark Powell


Infective endocarditis (IE) is a rare and potentially fatal infection. Patients often present with generalised symptoms resulting in delays in diagnosis. Complications are common and patients can have long inpatient stays due to intravenous antibiotic requirement. The POET study highlighted non inferiority of oral antibiotic switch in stable patients with left sided IE. The aim of our study is to characterise the IE patient population at our DGH, analyse their management, review adherence of our Endocarditis Team to the ESC 2015 guidelines (figure 1) and to review discharge information and advice, to identify areas for improvement.

Methods

This was a retrospective study of medical records for patients treated at our DGH with a diagnosis of IE between 1 Oct 2019 and 30 Sep 2020. Demographics, patient characteristics (table 1), IE risk factors, presentation, management, discharge information, patient feedback, and cost analysis was carried out. Adherence of our Endocarditis Team to ESC 2015 guidelines was reviewed.

Results

Between October 2019 and September 2020, 14 patients were diagnosed with IE according to the Duke Criteria. The median age was 75 (60-89) years and 68.7% of patients were male. 7 patients had a prosthetic valve and 3 had a cardiac device in situ. All patients had CVR risk factors, 50% had T2DM, 36% had renal disease. Only 2 patients had documentation of dental history. The majority of patients (n=12) presented via the Emergency Department. 86% of patients completed a 6-week antibiotic course. Only 14% of patients were managed as outpatients. 21% of patients required surgical management. All patients were reviewed by the Endocarditis Team. All patients were followed up appropriately. Only 1 patient had documented advice regarding dental care. 1 patient died and many patients had complications (figure 2). IE patient support group feedback highlighted concerns regarding delay in diagnosis, challenges of a long inpatient stay and benefits of hearing from other patients about their experiences.

Conflict of Interest

None

Annas Maaroufi, Hatim Zahi, Marwa Abdulhakeem, Rachida Habbal. Ibn Rochd University Hospital, Casablanca, Morocco

Methods

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Conclusion

Almost 3 out of each 4 patients with severe AS had TAVI was 83.9 years, otherwise average age for valvuloplasty and medical treatment groups were 83.6 and 85.6 years respectively.

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Conflict of Interest

None

Abstract 32 Table 1

<table>
<thead>
<tr>
<th>Patient characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Peripheral stigma of IE</td>
<td>14%</td>
</tr>
<tr>
<td>Murmur on auscultation</td>
<td>64%</td>
</tr>
<tr>
<td>Positive blood cultures</td>
<td>93%</td>
</tr>
<tr>
<td>Echocardiographic evidence of vegetation</td>
<td>71%</td>
</tr>
</tbody>
</table>