PDF hosted at the Radboud Repository of the Radboud University Nijmegen

The following full text is a publisher's version.

For additional information about this publication click this link. http://hdl.handle.net/2066/24307

Please be advised that this information was generated on 2017-07-22 and may be subject to change.
Case report
Lipomatous hypertrophy of the interatrial septum: indication for surgery?

C.J.A.M. Zeebregts a,*, A.G. Hensens a, J. Timmermans b, M.S. Pruszczynski c, L.K. Lacquet a

a Department of Cardio-thoracic Surgery, University Hospital, P.O. Box 9101, 6500 HB Nijmegen, The Netherlands
b Department of Cardiology, University Hospital, Nijmegen, The Netherlands

c Department of Pathology, University Hospital, Nijmegen, The Netherlands

Received 7 May 1996; accepted 6 June 1996

Abstract

A fortuitous finding during open heart surgery of lipomatous hypertrophy of the interatrial septum is described in a 65-year old man with ischaemic heart complaints due to coronary artery disease and with premature ventricular contractions. An incision biopsy confirmed the diagnosis. The choice of treatment of lipomatous hypertrophy of the interatrial septum is controversial. Indications for surgery and surgical techniques are discussed. © 1997 Elsevier Science B.V.

Keywords: Lipomatous hypertrophy; Interatrial septum; Arrhythmia; Resection

1. Introduction

Lipomatous hypertrophy of the interatrial septum (LHIS), a nonencapsulated mass of adipose tissue, usually in continuity with the epicardial fat, is a well defined entity [2,3]. Most data is derived from autopsy studies. LHIS diagnosed during life being a rarity [3,7]. Most of the patients with LHIS are over 60 years of age and although most of the patients are asymptomatic, some others experience cardiac rhythm disorders [3,5]. The choice of treatment of LHIS is controversial. We present the case of LHIS, recognized during life and discuss the role of resection as a treatment modality of asymptomatic and symptomatic lipomatous enlargements of the interatrial septum.

2. Case report

A 65-year-old Caucasian male patient was admitted, having New York Heart Association (NYHA) class II angina pectoris. The obese patient had a history of infarction of the anterior wall of the left ventricle, hypercholesterolaemia and 40 years of smoking. Chest X-ray revealed marked cardiomegaly. The electrocardiogram showed a sinus rhythm with premature ventricular contractions. A coronary angiogram showed three vessel disease. Left ventriculography revealed poor contractibility.

A coronary artery bypass grafting was planned. During the venous cannulation procedure, a ‘tumour’ in the atrial septum was palpated by chance. The mass was not only located in the atrial septum, but extended along the inferior pulmonary vein of the right lung and the free wall of the left and right atrium. Transoesophageal echocardiography (TEE) revealed a bilobed echogenic atrial septum with a thickness of 19.3 mm, consistent with LHIS or lipoma (Fig. 1). Therefore, direct bi-caval cannulation and mode rate sys-
Proposed alterations to current section, which propose the removal of the digital section and the addition of a new imagesection. The proposed alterations are designed to improve the overall layout and readability of the document.

The new section will focus on the integration of digital images and text, providing a comprehensive overview of the topic discussed in the original section. The new section will include high-resolution images and detailed annotations to enhance understanding.

The proposed changes are based on feedback from previous sections, where readers expressed the need for clearer and more organized presentation of information. The new section aims to address these concerns by providing a clear and concise summary of the key points, along with visual aids to support the text.

The changes will also include the removal of some redundant text, allowing for a more focused presentation of information. The new section will be structured in a way that makes it easy for readers to follow the flow of ideas and understand the main points.

Overall, the proposed alterations to the current section are expected to improve the document's readability and make it more accessible to a wider audience. The new section will be a valuable resource for researchers and students alike, providing a comprehensive overview of the topic discussed in the original section.
A tumour palpated in the interatrial septum, extending into the free right atrial wall, has several therapeutic options. If LHIS is complicated by severe rhythm disorders or altered haemodynamic cardiac function, resection may be considered, although it often necessitates major surgery. In the case of a small tumour, the septum may be excised and closed primarily by suture, however small tumours rarely are symptomatic. If it concerns large LHIS, after removal of the tumour including atrial septum, replacement of the septum with a dacron or autologous pericardial patch may be necessary. LHIS extends into the region of the AV node, but most often is located anterior to the foramen ovale. LHIS is usually situated in the area of at least two proposed interatrial conduction pathways (anterior and middle internodal pathways). The interruption of these pathways could be the major reason for rhythm disorders in these patients [6]. Partial or total resection of the interatrial septum probably will not relieve the patient from his rhythm disturbances, not in the least when the AV node region is involved. In that case, the patient may end up with a pacemaker.

To conclude, we consider that a fortuitous finding of lipomatous hypertrophy of the interatrial septum without symptoms, diagnosed by transoesophageal echocardiography pre- or peroperatively, should not be surgically corrected. To confirm the diagnosis, a needle biopsy or incision biopsy during heart surgery can be made. Only in the case of altered hemodynamic function leading to congestive heart failure and severe rhythm disorders, should surgical correction be considered, depending on the growth and size of the tumour and its relation to the great vessels.

References