

Images edited by James Hill, M.D.

Images in Cardiology: Magnetic Resonance Imaging of Primary Cardiac Lymphoma

MATHEEN A. KHUDDUS, M.D., CARSTEN M. SCHMALFUSS, M.D., F.A.C.C., JUAN M. ARANDA, JR., M.D., F.A.C.C., DANIEL F. PAULY, M.D., PH.D., F.A.C.C.

Division of Cardiovascular Medicine, University of Florida College of Medicine, Gainesville, Florida, USA

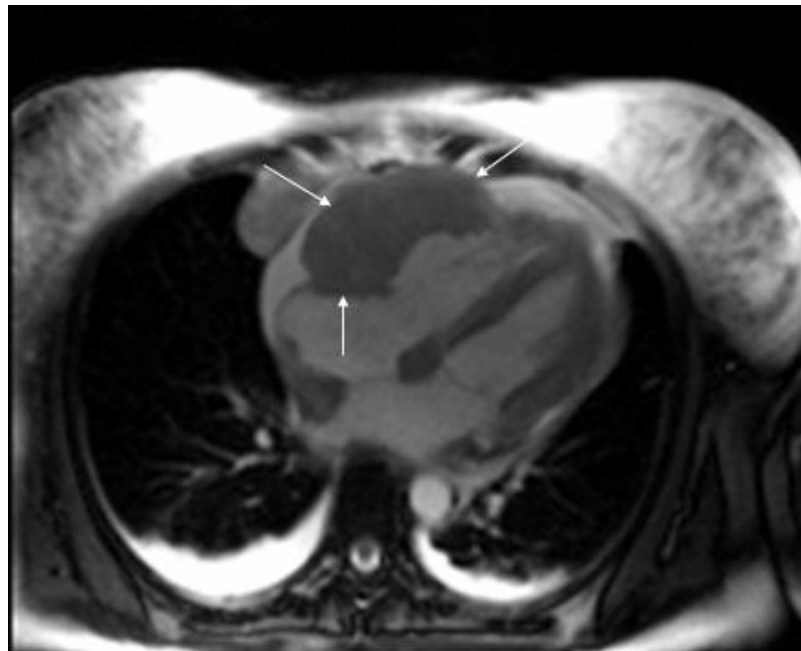


FIG. 1 Cardiac magnetic resonance image. Arrows mark the mass lesion.

A 53-year-old woman was admitted for evaluation of dyspnea. Her chest X-ray revealed bilateral pleural effusions. Echocardiography showed a mass involving the heart and great vessels. Cardiac magnetic resonance imaging showed the mass to be homogenous in texture, to involve the lateral aspect of the right ventricle, and to extend superiorly to the right atrium (Fig. 1). Pleural fluid cytology revealed lymphocytic cells with irregular nuclear contours, open chromatin, active mitotic figures,

and prominent nucleoli (Fig. 2). Flow cytometry confirmed the cells to be aggressive large B-cell lymphoma. Bone marrow aspirate and biopsy were negative for marrow involvement. Following one cycle of chemotherapy with rituximab and cyclophosphamide, hydroxydaunomycin, oncovin, prednisone (CHOP), there was a reduction in the size of the primary cardiac lymphoma, as assessed by echocardiography (Fig. 3).

Address for reprints:

Daniel F. Pauly, M.D., Ph.D., F.A.C.C.
Division of Cardiovascular Medicine
University of Florida College of Medicine
1600 S.W. Archer Road
Gainesville, FL 32610, USA
e-mail: paulydf@medicine.ufl.edu

Published online in Wiley InterScience
(www.interscience.wiley.com).
DOI:10.1002/clc.20027

© 2007 Wiley Periodicals, Inc.

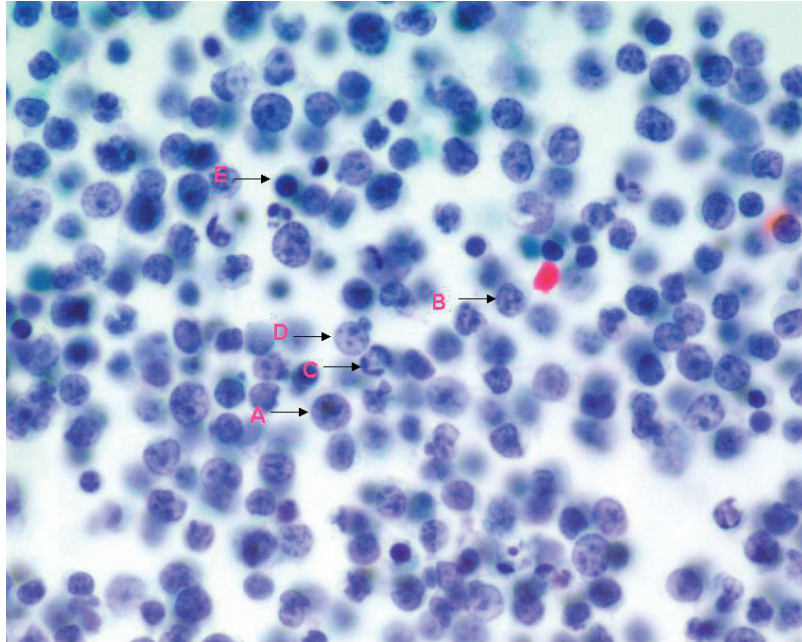


FIG. 2 Pleural fluid cytology. Arrows show lymphocytes with irregular nuclear contours (A), open chromatin (B), active mitotic figures (C), and prominent nucleoli (D). A normal appearing lymphocyte is shown for comparison (E).



FIG. 3 Transthoracic echocardiography of primary cardiac lymphoma. The left panel shows the mass lesion before treatment. The right panel shows reduction in its size following one cycle of chemotherapy. Arrows denote the borders of the mass.