Fig. 1. Granular cell myoblastoma. The tumor is composed of polygonal cells, with abundant eosinophilic granular cytoplasm. Neoplastic cells characteristically dissect the collagen fibers (hematoxylin and eosin stain, original magnification $\times 315$). *Inset*, A more detailed view of the cytologic features of neoplastic cells (hematoxylin and eosin stain, original magnification $\times 500$).

Granular cell myoblastoma (Abrikossoff tumor) of the chest wall: A never described site of a rare tumor

To the Editor:

We report a never before described case of granular cell myoblastoma (Abrikossoff tumor) originating in the chest wall.

A 30-year-old woman had a swelling of the sternum that had increased in size and consistency during the last few months. The mass was solid and firm, and it ached on palpation.

Tumor biopsy revealed a granular cell myoblastoma (Fig. 1). Four years ago the patient underwent a surgical excision of the mass, measuring 3×2 cm. The mass was easily separated from the superficial layers but adhered tenaciously to the sternum and intercostal spaces. Because of the severe aesthetic damage of a thoracotomy in a young patient and the benign nature of the tumor, tumor ablation was incomplete and a 2 cm mass (Fig. 2) remained.

Granular cell myoblastoma was first described by Abrikossoff¹ in 1926. It is a rare tumor predominantly found in the skin or subcutaneous tissue of head and neck regions. Other frequent locations are tongue (40%), breast (15%), respiratory tract (10%), and esophagus (2%). Abrikossoff tumor can often be multicentric (5% to 14% of cases).²

Abrikossoff¹ described this neoplasm as a myoblastoma, reflecting its probable origin from striated muscle cells. Fisher and Wechsler³ demonstrated by means of electron microscopy the similarity with neuronal cells. In 1990 Mozur, Schultz, and Myers⁴ definitely confirmed, by the use of a panel of commercial antibodies, the neuronal histogenesis.

The tumor is usually benign. Unfortunately, it is impossible to make a diagnosis of malignant tumor on the basis of cellular pleomorphism, mitotic activity, or ultrastructural findings. Only obvious macroscopic features, that is, size greater than 5 cm,

Fig. 2. Computed tomographic scan demonstrating a mass, in left parasternal region, that is not connected with pulmonary parenchyma. Absence of lymph nodal masses.

rapid growth rate, or invasion of adjacent structures, may suggest a malignant behavior.

Despite the recurrence risk of incompletely excised tumor, Diehl and Kaplan⁵ proposed a conservative management of Abrikossoff tumor of the breast in adolescents, balancing the low incidence of malignant transformation. On the basis of such considerations, we preferred to follow up the patient, in partic-

ular by computed tomographic scans, reserving thoracotomy as an option in case of a tumor recurrence. The diameter of the tumor is unchanged 2 years after the first computed tomographic scan.

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REFERENCES

1. Abrikossoff A. Über myome ausgehend von der quergest-eiften willkurlchen musculator. Virchows Arch Pathol 1926;260:215-23.
2. Lack EE, Worsham GM, Callihan MD, et al. Granular cell tumor: a clinico-pathologic study of 110 patients. J Surg Oncol 1980;13:301-16.
3. Fisher ER, Wechsler H. Granular cell myoblastoma—a misnomer. Cancer 1962;15:936.
4. Mozur MT, Schultz JJ, Myers JL. Granular cell tumor: immunohistochemical analysis of 21 benign tumors and one malignant tumor. Arch Pathol Lab Med 1990;114:692-6.
5. Diehl T, Kaplan DW. Breast masses in adolescent females. J Adolescent Health Care 1985;6:353-7.

Double-chambered right ventricle associated with left ventricular dysfunction

To the Editor:

A 31-year-old man was admitted because of orthopnea (New York Heart Association functional class IV) with progression of symptoms for the past 8 years. On physical examination the apical impulse was displaced to the anterior axillary line in the sixth intercostal space and was enlarged. The second heart sound was widely split. He had marked peripheral edema and chronic dermatosis of the lower legs. The electrocardiogram showed atrial fibrillation and right bundle branch block with poor R-wave progression in the precordial leads.

Transthoracic echocardiography revealed an additional right

Fig. 1. Transthoracic echocardiography. A, Apical four-chamber view. B, Apical two-chamber view. LA, Left atrium; LV, left ventricle; RA, right atrium; RV, right ventricle; RV II, additional right ventricle.