■ Letter To The Editor

Intracardiac Masses

İntrakardiyak Kitleler

Ihsan Alur^{1*}, Tevfik Gunes²

¹Istinye University Medicalpark Gaziosmanpasa Hospital, Cardiovascular Surgery Department ²Private Akut Kalp Damar Hospital, Cardiovascular Surgery Department

Öz

Budak ve arkadaşlarının yazısını ilgiyle okuduk. (1) "Atriyal Kitleyi Taklit Eden Spontan İntramural Sol Atriyal Hematomların Robot Yardımlı Yönetimi" başlıklı yazı derginin 1/2023 sayısında yayınlandı. Bu yazı için yazarları tebrik ederim.

Anahtar kelimeler: intrakardiyak, kitle, atriyal, ventriküler

Abstract

We read the article with great interest by Budak et al. (1) titled "Robot-Assisted Management of Spontaneous Intramural Left Atrial Hematoma Mimicking an Atrial Mass" published in the Issue 1/2023 of the journal. Congratulations to the authors for this article.

Keywords: intracardiac, mass, atrial, ventricular

Corresponding Author*: Ihsan Alur, Istinye University Medicalpark Gaziosmanpasa Hospital, Cardiovascular Surgery Department E-mail: alur_i@hotmail.com

ORCID ID Number: 0000-0003-4776-1379

Doi: 10.18663/tjcl.1286799

Recevied: 24.04.2023 accepted: 26.04.2023



Intracardiac masses are one of the confusing issues in cardiac surgery. It is not easy to make a definite differential diagnosis of these masses. The reasons for this are; the heart is a dynamic organ in constant motion, difficulty in imaging due to circulating blood volume and cyclical shrinkage and enlargement, and difficulty in performing invasive procedures due to the risk of thromboembolism. For these reasons, the definitive diagnosis and treatment of intracardiac masses is usually surgical removal of the mass. However, recently, realtime sampling could be performed in two cases with left atrial masses by esophageal endoscopic ultrasound. Burkitt lymphoma was found in one case and synovial sarcoma in the other (2). Intracardiac echocardiography guided biopsy was also performed in a case with a mass in the left ventricle and stage 4 metastatic lung cancer was detected (3). Malignancies that spread hematogenously or lymphatic (such as lymphoma, leukemia, malignant melanoma, sarcoma) may form an intracardiac mass (4) and the primary treatment in these patients is usually chemotherapy, not surgery. Therefore, if there is a metastatic intracardiac mass due to a malignant disease, its treatment may not be primarily removed by open heart surgery. These patients should definitely undergo cardiac CT or MR imaging before surgery. These imaging methods can give an idea about whether the cardiac mass is a thrombus or a tumoral formation. Localization of the intracardiac mass is also important. For example, the mass in the right atrium may originate directly from the atrium wall or may extend through the inferior vena cava and reach the right atrium (5). Especially in tumors such as renal cell CA and intravascular leiomyoma, the mass may extend into the right atrium via the venous route. Direct spread can also occur in mediastinal cancers (thymus or lung cancers) (6).

In conclusion, the differential diagnosis of intracardiac masses is difficult and there is no definitive algorithm on this subject yet. When planning the operation, cardiac CT or MR imaging and even echocardiography guided biopsy should be performed if necessary, and if the mass is a thrombus or a primary tumor of the heart, it should be surgically removed. In metastatic or directly disseminated intracardiac masses, appropriate treatment should be performed according to the histopathological diagnosis of the tumor.

References

- Budak AB, Huzmeli H, Oguz E, Ozkara A. Robot-Assisted Management of Spontaneous Intramural Left Atrial Hematoma Mimicking an Atrial Mass. Turk J Clin Lab 2023; 1: 202-205.
- Sudarshan Balla, MBBS, Chalak Berzingi, C. Michael Brown, Mohamad Alkhouli. Intracardiac Echocardiography–Guided Biopsy of a Left Ventricular Mass. J Am Coll Cardiol Case Rep 2019;1(3):424–5.
- Haizea Alvarez Martinez, Jolanda C. Kuijvenhoven, and Jouke T. Annema. Intracardiac EUS-B-Guided FNA for Diagnosing Cardiac Tumors. Respiration. 2021 Sep; 100(9): 918–922.
- İhsan Alur, Tevfik Güneş, Ali Vefa Özcan, İbrahim Gökşin, Gökhan Önem, Bilgin Emrecan. Intracardiac tumors: results from a single heart center. Turk Gogus Kalp Dama 2016;24(3):462-467.
- İhsan Alur, İbrahim Gökşin, Yusuf İzzettin Alihanoğlu, Fırat Durna, Levent Tuncay. Simultaneous nephrectomy, intracaval and right atrial tumor excision, caval patchplasty and coronary artery bypass grafting in patient with renal cell carcinoma. Cardiovascular Surgery and Interventions 2014;1(2):45-48.
- İhsan Alur, Hayati Taştan, Gökhan Yiğit Tanrısever, Bilgin Emrecan.
 A thymoma invading the right atrium. Turk Gogus Kalp Dama 2015;23(2):371-373.