

# WCC 2017-C-102: A RARE CASE REPORT OF METASTASIS OF CARCINOMA CERVIX INTO HEART IN AN ASYMPTOMATIC YOUNG FEMALE

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## BACKGROUND:

Metastatic tumors of the heart are 20 to 40 times more common than primary cardiac tumors. Cardiac metastasis from pelvic malignancy is rare and gynecological tumors rarely metastasize to the heart. Direct metastasis into the heart is very rare and most of the cases are diagnosed postmortem during the autopsy. We report a case of metastatic carcinoma of uterine cervix direct extension into the right atrium (RA) and right ventricle (RV) in an asymptomatic patient.

## MATERIALS AND METHODS:

A 34 year old female, with no known comorbidities, P2 L2, initially visited Gynecologist with chief complaints of menorrhagia since 2 months and found to have a bulky proliferative growth involving both lips, all fornices and on per abdomen, it is extending upto Umbilicus. Patient evaluated outside with MRI pelvis showing infiltrating cervical mass with no evidence of infiltration into surrounding organs and CT scan chest showing metastasis involving left upper lobe of the lung. On Cardiovascular examination first and second heart sounds heard normally with a tumor plop heard all over precordium. 2D echocardiography did at our center showing echogenic freely moving mass in RA and RV (Fig 1) extending from hepatic part of inferior venacava into RA and RV ( Fig2 ) measuring about 3.47X3.91cm(Fig3).

Fig 1: Apical 4 chamber view showing mass in right atrium and extending into right ventricle.



Fig.2: Mass extending from inferior venacava into right atrium seen in sub costal view.



Fig 3: A 3.47 X 3.91cm mass extending from right atrium into right ventricle seen in apical 4 chamber view.



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## DISCUSSION:

The metastatic cardiac tumors are 40 times more frequent than tumors originating from the cardiac region [1]. Cardiac metastasis from cervical cancer is uncommon, with an incidence of 1.23% based on autopsy findings [2]. The primary tumors of cardiac metastases are often malignant melanoma, malignant lymphoma, leukemia, lung cancer, and breast cancer. Direct invasion, lymphatic and vascular metastasis are the usual modes of cardiac involvement. Pericardium is the most common site of involvement, while myocardial and endocardial involvement is rare. Involvement of cardiac chambers is usually due to tumor thrombosis and is through the vena cava or retrograde flow from the lymphatic channels [3]. Metastatic cancer to the heart is generally a late manifestation of malignancy as the patient usually has metastasis in other locations. Rarely, the heart is the only site of metastasis. Uterine cervical carcinoma commonly spread to the lung, bones, cervical region and supraclavicular lymph nodes. The prognosis of a metastatic heart tumor is poor; the average life expectancy of patients with this diagnosis is less than six months.

## CONCLUSION:

Metastasis of carcinoma cervix into heart is very rare especially in young female, meticulous local examination and high index of suspicion with necessary investigations can be helpful in diagnosis. Patient referred to oncologist for follow up and treatment.

## REFERENCES:

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