# Case of fake acute abdomen by metastatic melanoma



Ann. Ital. Chir., 2012 83: 357-358 Published online 21 Novembre 2011 (www.annitalchir.com)

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## A case of fake acute abdomen by metastatic melanoma

Malignant melanoma is the neoplasm with highest probability of cardiac metastatization. Cardiac involvement by metastatic melanoma is rarely identified ante-mortem (5-30% of cases) for non-specificity of cardiac symptoms. In fact we show in this case report that abdominal pain can represent the predominant symptom. Furthermore we show the importance of linkage between clinical & anamnestic data which if underestimated can lead to an improper management and to the patient exitus.

KEY WORDS: Melanoma, Metastatization.

#### Introduction

Malignant melanoma is the neoplasm with highest probability of cardiac metastatization. Most frequently the right side of the heart is involved, especially the atrium <sup>1</sup>. Nevertheless an isolated cardiac involvement is a rare finding. It is rather part of a widespread dissemination <sup>2</sup>. However, cardiac involvement by metastatic melanoma is rarely identified ante-mortem (5-30% of cases) because of the paucity or non-specificity of cardiac symptoms <sup>1</sup>, <sup>3,4</sup>. In fact many different manifestations are described in literature such as acute pericarditis, pericardic suffusions, congestive heart failure, arrhythmias, embolic events and syncope <sup>3</sup>. In our case report we show that abdominal pain can represent the predominant symptom.

## Case report

A 42 years old woman was admitted as emergency with diagnose of acute cholecystitis. The clinical examination reported a painful abdominal distension, positive Murphy-sign, negative Blumberg-sign, tenderness on deep palpation. The clinical chest examination reported also the absence of physiologic sounds in lower-right lung area. The cardiac auscultation revealed no rubbing sounds and cardiac tones were deadened.

There was a surgical abdominal scar. Anamnestic data reported progressive dyspnoea and asthenia for the previous 30 days. Also the patient has already refused the hospitalization in a cardiologic department of another hospital. There was nausea and an episode of vomit.

She had previously undergone an operation for malignant melanoma with sentinel lymph-node biopsy. The patient undergone to ultrasound and X-Ray follow-up resulted always negative.

In accordance with admittance diagnosis, she was studied with abdominal ultrasound (US) which confirmed thelithiasis, wall-thickening of gallbladder & ascites. The ECG revealed low-voltages waves. The chest X-Ray(RX) revealed a little augmentation of cardiac shadow (3° left arch).

Pervenuto in Redazione Marzo 2011. Accettato per la pubblicazione Giugno 2011

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During the admission the patient suddenly showed clinical worsening with intense dyspnoea to minimum effort (Karnofsky 50 to 30). After cardiologic counselling, she was examined with transthoracic echocardiography and total body Computed Tomography(CT) for the suspect of metastatic melanoma 5. The US showed a mass in the right atrium coming from interatrial septum. Ventricular myocardium appeared reticulated such as due to infiltrative disease involving the rear-lower wall and interventricular septum. Lesions were present in the upper lobes of the lung, into liver, on peritoneum, on ventricles, into left atrium &a single (65 x 60 x 60 mm) was also present in the right atrium. The patient underwent to surgery. There was a dissemination of humped lesions on the anterior face (2 cm each one), sharp margins and brown coloured. The exploration of right atrium revealed a big mass encompassing the untrabeculated atrium and the Sondegard fissureup to the pericardic posterior fissure. Repetitive lesions were present in the ventricles. The greater mass involved the muscular cardiac wall, so the excisionwas impossible. In norm-thermicbeating heart CEC was performed a right atriotomy. A large intracardiac mass localized on the right atrium wall and interatrial septum was found. It almost completely obstructed the tricuspid obstium.

Surgical management was personalized for the extension of tumour and no sure surgical cut line. The mass was taken out by fragmentation to favourite caval venous drainage <sup>6</sup>. The patient was discharged on the 9° post-operative day and sent to the oncologist for therapy and follow-up. She died after 6 months for cerebral metastatic complications.

### Discussion

This case shows that the hearth can support a progressive enlargement of an endo and extracavitary mass without specific symptoms whichcan onset later and being associated with other non-specific ones. Furthermore, it underlines the importance of linkage between clinic & anamnestic data. In fact, dyspnoea and asthenia were referred to abdominal condition while metastatic involvement of the liver and the blood stasis due to heart congestion was probably the principal cause of abdominal pain. So the patient was admitted to general surgery department. Here the abdominal condition was related to congestive heart failure <sup>7</sup> and quickly studied in accordanceto literature, cardiologist and cardiacsurgeon. Once focused the pathology, the patient was moved in the appropriate department.

If not integrated with a thorough anamnestic assessment the clinical evaluation, alone, may lead quickly to death, however not justifiable even if the severity of disease and prognosis are highly ominous. Surgery can be useful to alleviate symptomatology and prevent death due to cardiologic complications.

#### Riassunto

Il melanoma maligno è la neoplasia con la più alta probabilità di metastatizzazione cardiaca. Il coinvolgimento cardiaco da melanoma metastatico è raramente identificato ante-mortem (5-30% dei casi) per la non specificità dei sintomi cardiaci. In questo "Case report" intendiamo dimostrare che anche il dolore addominale può rappresentare il sintomo predominante. Infatti, l'associazione tra epatomegalia congestizia e lesioni ripetitive epatiche può tradursi, da un punto di vista clinico, in una sintomatologia algica localizzata ai quadranti addominali superiori, associata ad ascite ed ai segni ecografici di una colecistite alitiasica. Inoltre, in un paziente giovane come nel nostro caso, in assenza di comorbidità cardiache, le lesioni ripetitive possono raggiungere dimensioni ragguardevoli prima di dare un riscontro clinico, Questa noostra esperienza ci porta a ribadire l'importanza del collegamento tra i dati clinici e quelli anamnestici. Affidarsi esclusivamente alla clinica sottovalutando i dati anamnestici può portare ad una gestione impropria che, anche se la prognosi risulta comunque infausta, non giustifica comunque l'exitus del paziente.

## Bibliografia

- 1. Roubille F, Gahide G, Cayla G, Serre S, Sportouch-Dukhan C, DavyJ-M, Pio C: *Recent Malignant Dyspnea*. Inter Med, 2008; 47:427-29.
- 2. Chen RH, Gaos CM, Frazier OH: Complete resection of a right atrial intracavitary metastatic melanoma. Ann Thorac Surg, 1996; 61:1255-257.
- 3. Chrissos DN, Stougiannos PN, Mytas DZ, Katsaros AA, George K. Andrikopoulos GK, Kallikazaros IE: *Multiple cardiac metastases from a malignant melanoma*. European Journal of Echocardiography, 2007; 9:391-92.
- 4. Gibbs P, Cebon JS, Calafiore P, Robinson WA: Cardiac metastases from malignant melanoma. Cancer, 1999; 85:78-84.
- 5. Restepo CS, Largoza A, Lemos DF, Diethelm L, Koshy P, Castillo P, Gome R, Moncada R, Pandi M: *CT and MR findings of malignant cardiac tumors*. Curr Probl Diagn Radiol, 2005; 34:1-11.
- 6. Mesnsner G, Harting MT, Russo P, Gregoric ID, Mukhopadhyay M, Flamm SD, Frazier OH: *Surgical management of metastatic melanoma to the ventricle*. Tex Heart Inst, 2003; 130:218-20.
- 7. Bosset T, van Son JAM, Autschbach R, Mohr FW: Resection of a right atrial metastatic melanoma with unknown origin of primary tumor. Europ Journ Cardio-thoracic, 1999; 15:373-75.