



## **TAKAYASU ARTERITIS WITH MYOCARDITIS AS INITIAL PRESENTATION: A CASE REPORT**

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### **BACKGROUND**

Takayasu Arteritis (TA) is a progressive inflammatory granulomatous disease of large and medium-sized arteries, affecting the aorta and its main branches. Systemic and vascular symptoms are common in these patients and cardiac involvement also can be present frequently related to aortic valve regurgitation, from dilation of the aortic root, coronary vessel stenosis and less commonly cardiomyopathy and myocarditis. Here, we reported a case of myocarditis associated with TA from our tertiary center.

### **CASE REPORT**

A previously healthy black 15-year-old patient with history of asthenia and weight loss for 4 months, evolving abruptly with dyspnea, chest and abdominal pain, which progressed with respiratory failure, hemodynamic instability and renal dysfunction. Thoracic and abdominal angiotomography (angio-CT) was performed showing fluid in the abdominal cavity and tapering of the abdominal aorta with possible dissection. Exploratory laparotomy showed only serous ascites without signs of dissection and abdominal ischemia. Viral and bacterial infections were absent and the patient did not have history of drug use. The echocardiogram (echo) exhibited normal sized cardiac chambers and valves, moderate systolic dysfunction by diffuse hypokinesia, ejection fraction of 35% and a coronary angiotomography exclude ischemic involvement. Laboratory tests demonstrated anemia with hemoglobin of 10.2g/dL (14-16), C-reactive protein 58mg/L (<5) and erythrocyte sedimentation rate of 33mm/h (up to 10). Considering the hypothesis of vasculitis of large vessels a new angio-CT revealed thickening of the left subclavian artery and the thoracic, descending and abdominal aorta (upper and lower mesenteric, renal, lumbar, hepatic, splenic and iliac), suggesting Hata V topographic type of Takayasu Arteritis. He was treated with methylprednisone pulse therapy with hemodynamic stability, clinical and laboratory improvement. Control echo showed improved of ejection fraction and angio-CT after treatment showed reduction of aortic thickening. Subsequently Glucocorticoid 1mg/kg and mycophenolate mofetil was introduced, with progressive weaning of corticoids with control of the disease.

### **CONCLUSION**

Some studies indicate that more than 50% of the patients with TA have some degree of myocardial inflammation, which is in general subclinical. The clinically significant myocarditis is rare, but when presents is a life-threatening condition. Initial aggressive immunosuppressive therapy is highly recommended. Therefore the diagnosis of TA should keep in mind in young patients with myocarditis as initial presentation and unclear etiology.