

Clinical Cardiology

Usefulness of Intrapericardial Cisplatin for the Management of Malignant Pericardial Effusion

Marcelo Zylberman, Carmen Pupareli, Adolfo Rosales, Moisés Rosemberg, Daniel Santos, Natalio Gastaldello, Ana K. Patané

Background

The recurrence rate of malignant pericardial effusion after pericardiocentesis is 62%. For this reason, intrapericardial instillation of therapeutic agents is performed after pericardial evacuation to improve the treatment. Cisplatin has proved to be a useful and safe agent.

Objective

To present our experience with intrapericardial instillation of cisplatin for the management of malignant pericardial disease.

Material and Methods

We included patients admitted to the Instituto Alexander Fleming between January 2005 and May 2009 with cardiac tamponade or severe pericardial effusion treated with pericardial drainage and instillation of cisplatin (10 mg in 20 ml of physiological solution for 5 days). Malignant pericardial effusion had to be confirmed by cytological examination or by echocardiographic evidence of malignant disease involving the pericardial space. Low treatment expectation was another requirement for inclusion.

Results

A total of 9 patients (6 men and 3 women) were included; mean age was 60 years (51-69). The primary tumors were lung cancer (n=4); breast cancer (n=1); bladder cancer (n=1); esophageal cancer (n=1), and prostate cancer (n=1). The cytological examination was positive in 6 cases. The catheter was removed after 7 days. Three patients presented adverse events: pain, fever and atrial fibrillation. One patient had a recurrence one month later. Eight patients died [mean time to death: 50 days (7-83)] and one is alive.

Conclusion

Intrapericardial instillation of cisplatin is a feasible and welltolerated procedure. The incidence of recurrences is low.