Alcoholic cardiomyopathy

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DESCRIPTION

A 42-year-old man was admitted to our internal medicine unit because of exertional dyspnoea and peripheral oedema. The patient was also experiencing fatigue and reduction in effort tolerance. He denied palpitations or chest pain. Medical history was unremarkable for cardiovascular events; he did not smoke and denied family history of heart disease. However, the patient was found to have a history of alcohol dependence lasting 20 years, with a mean alcohol consumption of 15–20 drinks/day (1 drink=12.5 g ethanol).

At physical examination he appeared tachypneic. Blood pressure was 140/80 mm Hg, pulse was 90 bpm and respiratory rate was 20 breaths/min. Cardiac examination showed reduced S1, normal S2, moderate systolic murmur (3/6) together with S3. At thoracic examination bilateral signs of pulmonary suboedema were audible. ECG showed sinus rhythm with complete right bundle branch block. Echocardiography showed dilated cardiomyopathy with markedly depressed ejection fraction (25%) and mitral regurgitation. Treatment included furosemide, spironolactone, carvedilol and ramipril. Implantable cardioverter defibrillator (ICD) implantation was also performed.

The patient started a multidisciplinary programme, including counselling and baclofen 10 mg three time a day, to achieve and maintain total alcohol abstinence at our Alcohol Addiction Unit.[1]

A chest X-ray performed 1 month after ICD implantation shows typical signs of alcoholic cardiomyopathy (figure 1). The patient has been totally abstinent from alcohol since 3 months.

Alcohol induces several changes in the myocardial structure (myocyte loss, intracellular organelle dysfunction and contractile protein alterations). However, the exact pathogenesis of alcoholic cardiomyopathy is still unclear. Total alcohol abstinence, together with heart failure treatment drugs, results in at least partial recovery of the myocyte damage, with a consequent improvement in cardiac function.[2]

Learning points

- Alcohol misuse is one of the causes of dilated cardiomyopathy.
- The exact pathogenesis of alcoholic cardiomyopathy is still unclear.
- Treatment must include complete alcohol abstinence together with the treatment of heart failure.

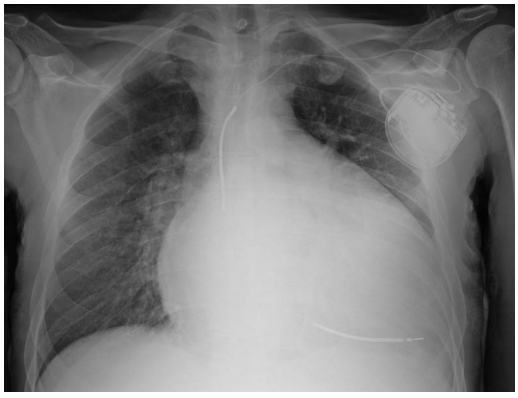

Figure 1 Chest X-ray showing signs of alcoholic cardiomyopathy (cardiomegaly, venous vessels enlargement, pulmonary oedema).

Contributors All the authors managed the patient during hospitalisation. AM, GV and GA are currently managing the patient in the Alcohol Addiction Unit. All the authors wrote and revised the manuscript.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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