cases is low duct ligation and partial one'41 reports a follow-up over 26 of the disease. Only two articles'4'51 reports especially on the clinical course been found. There are few available isolated primary chylopericardium has ment of asymptomatic patients with pericardectomy. No clear-cut manage- tic recommendation for symptomatic of symptoms'21. The general therapeu- clinical presentation in the majority of describe a follow-up over many years: of anatomical and clinical studies revealed a high variability of the thoracic lymphatic system131. Cha [31 revealed a high variability of the thoracic duct anatomy with 32% du- plication, 56% segmental plexus for- mation, and 19% multiple plexus formation. In 50% of the patients with the latter abnormality, no main duct was present. However, in none of the patients was a chylopericardium present. Thus the lymphatic abnor- malities found in our patient seem to be an extremely rare finding resulting in massive chylopericardium. The clinical presentation in the majority of the cases, even in the presence of mas- sive pericardial effusion, is the paucity of symptoms22. The general therapeuti- cal recommendation for symptomatic cases is low duct ligation and partial pericardectomy. No clear-cut manage- ment of asymptomatic patients with isolated primary chylopericardium has been found. There are few available reports especially on the clinical course of the disease. Only two articles44,5 describe a follow-up over many years: one4 reports a follow-up over 26 years in a patient who remained com- pletely asymptomatic, the other de- scribes the case of a 7-year-old girl with a decreasing chylopericardium after a 5 year diet with medium chain triglycerides3.

Pericardial tamponade is the most dangerous complication of chylopericardium; however, it is very rare in isolated primary cases. In these patients only those who developed a cardiac tamponade become symptomatic. Since in the present patient complete normal pressure values at cardiac catheterization at rest and ex- ercise were found, cardiac tamponade was unlikely to occur. Given the par- ticular anatomical situation, with an aplasia of the distal part of the thoracic duct, the recommended op- erative therapy with subdiaphragmal duct-ligation cannot be performed. In those patients in whom this procedure cannot be used, instilling blue dye intra-operatively is useful to identify the duct. However, if it is impossible to identify the thoracic duct intra- operatively and ligation of all vessels is attended without previous blue dye identification, the operative success rate is considerably reduced.

In asymptomatic patients with primary chylopericardium and normal haemodynamics at rest and during ex- ercise, surgery is not necessarily indi- cated. We feel that these patients should be treated medically as long as possible. Intervventional treatment has to be considered when patients become clinically symptomatic.

Figure 1 Lymphangiography. At the level of 12th vertebra a cisterna chylif and the distal portion of the thoracic duct cannot be identified. The plexus formation of lymphatic vessels can be seen in the upper left hilar region. The proximal part of the thoracic duct is correctly positioned at the angle of the vein.

The underlying pathophysiol- ogy of primary chylopericardium is unclarified and discussed controver- sially in the literature. An accumu- lation of chyle in the pericardial space may be due to an obstruction of the thoracic duct with a resultant increase in intraductal pressure and failure to establish collateral lymph drainage to the right thoracic duct22. A number of anatomical and clinical studies revealed a high variability of the thoracic lymphatic system3. Cha [3] described a 23% variation in the thoracic duct anatomy with 32% dup- lication, 56% segmental plexus for- mation, and 19% multiple plexus formation. In 50% of the patients with the latter abnormality, no main duct was present. However, in none of the patients was a chylopericardium present. Thus the lymphatic abnor- malities found in our patient seem to be an extremely rare finding resulting in massive chylopericardium. The clinical presentation in the majority of the cases, even in the presence of mas- sive pericardial effusion, is the paucity of symptoms22. The general therapeuti- cal recommendation for symptomatic cases is low duct ligation and partial pericardectomy. No clear-cut manage- ment of asymptomatic patients with isolated primary chylopericardium has been found. There are few available reports especially on the clinical course of the disease. Only two articles44,5 describe a follow-up over many years: one4 reports a follow-up over 26

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ventricular fibrillation. Cardiopulmonary resuscitation was initiated and sodium bicarbonate administered. Electroconversion was unsuccessful and was repeated after the administration of several doses of both lidocaine and epinephrine. After the fourth unsuccessful attempt, 20 mmol of magnesium sulphate was given and defibrillation repeated. Ventricular fibrillation continued and another 20 mmol of magnesium sulphate was given, after which electroconversion resulted in a stable regular heart rhythm. A continuous infusion of epinephrine was started and haemodynamic performance normalized.

Lidocaine is usually recommended to treat persistent, haemodynamically significant arrhythmias in TCA poisoning, but no controlled studies proving its efficacy exist. The membrane stabilizing properties of lidocaine may further compromise cardiac performance in TCA poisoning and reduce cardiac conduction\(^1\)\(^,\)\(^4\). Magnesium sulphate can also reduce cardiac output, mainly through vasodilatation and induction of bradycardia, but both of these side effects have been shown to be easily counteracted through administration of epinephrine or norepinephrine\(^3\).

We consider magnesium sulphate to be a safe and effective treatment in life threatening ventricular arrhythmias due to TCA poisoning providing the patient is adequately ventilated and careful monitoring of blood pressure and heart rhythm is employed.

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References