In Crohn's disease the mean plasma propranolol levels were significantly raised at all sampling times apart from the first. The area under the curve was also significantly greater than that of the controls (P=0.01-0.001). The values in Crohn's disease showed a much greater variability and were not related to the patients with coeliac disease. They fell into two groups: high values and those nearer control values. The high values seemed to relate to a rise in the erythrocyte sedimentation rate. Except in one patient who had a slightly lowered plasma albumin concentration, no abnormalities in liver function were found. The relevance of these findings to multiple dosing as used clinically is to be investigated.

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1 Parsons, R L, et al, Gut, 1976, 17, 139.

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Disopyramide in a case of recurrent ventricular fibrillation

Disopyramide (4-di-isopropylamino-2-phenyl-2-(2-pyridyl)butyramide phosphate) given propractically after myocardial infarction has been known to cause a significant reduction in ventricular arrhythmias. We describe a patient with recurrent ventricular fibrillation after myocardial infarction that was resistant to intravenous lignocaine but responded to oral disopyramide.

Case report

A 65-year-old welfare officer was admitted with a six-hour history of central chest pain. For a week before admission he had had twinges of pain in the same area on exercise. There was no other significant history. He was a non-smoker. His mother died of coronary heart disease at the age of 62. On admission he looked fit and was in sinus rhythm with a pulse of 64/min and a blood pressure of 130/80 mm Hg. He had no evidence of heart failure. An electrocardiogram showed an anterosapital and lateral infarction. The chest x-ray picture showed an enlarged cardiac shadow with clear lung fields. Cardiac enzymes—L-aspartate transaminase and hydroxybutyrate dehydrogenase—were 230 IU/l (normal 9-35) and 1660 IU/l (normal 50-325) respectively 24 hours after admission. After three days in bed he was gradually mobilised. On the 14th day, when he was fully mobilised, he suddenly collapsed. He was pulseless, with an unrecordable blood pressure; he was in ventricular fibrillation. He was restored to sinus rhythm with a DC shock of 200 joules, followed by a bolus of 100 mg lignocaine intravenously and an infusion of lignocaine at 3 mg/min, reduced to 2 mg/min four hours later. In spite of the intravenous lignocaine and boluses of intravenous phenytoin and procainamide, further cardiac arrests occurred at 12-24 hour intervals, with ventricular fibrillation shown on the monitor. By the 28th day his condition had deteriorated as the periods between arrests had decreased to one to two hours. His lungs remained clear on 80 mg of frusenide daily. After 29 incidents requiring DC conversion, he was started on disopyramide, 200 mg four times a day, and lignocaine was tailed off. His last arrest (30th) was an hour after starting the drug. He made an uneventful recovery and was discharged three months after admission. During his stay he was on prophylactic subcutaneous heparin. At one stage he developed acute urinary retention, a known complication of disopyramide. He remained on the drug, 100 mg four times a day, for 12 weeks after discharge.

Comment

Cardiac arrhythmias have been implicated as the major cause of death in patients with myocardial infarction; ventricular fibrillation has been present in 90%, of these patients. So far intravenous lignocaine has been the most widely used antiarrhythmic agent for a variety of ventricular arrhythmias.

This report illustrates a case of recurrent ventricular fibrillation after myocardial infarction that was resistant to intravenous lignocaine given at a rate of 2 mg/min over many days but which responded to oral disopyramide.

Disopyramide is one of the recent antiarrhythmic agents found to be effective in various arrhythmias, both atrial and ventricular. It is said to possess both parasympatholytic and local anaesthetic properties, being as active as lignocaine in this latter respect. The drug's apparent effectiveness is probably due to its ability to prolong the refractory period of the atria and the ventricles. Supraventricular or ventricular tachycardias are thought to be due to re-entry mechanisms initiated by atrial or ventricular premature beats. Suppression of these premature beats by disopyramide in addition to prolongation of the atrial or ventricular effective refractory period should be a valuable effect for the termination of such tachycardias. Oral disopyramide may therefore be a useful alternative to intravenous lignocaine in preventing life-threatening ventricular tachyarrhythmias after myocardial infarction.

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Cervical pregnancy managed by local excision

Cervical pregnancy is rare, the incidence recorded by Dees being 1 in 18 000 pregnancies. It is often associated with considerable vaginal bleeding which usually necessitates emergency hysterectomy. In the case described below treatment was by local excision.

Case report

A 26-year-old married primigravida with 12 weeks amenorrhoea was admitted as an emergency, complaining of painless vaginal bleeding for about 24 hours. Three weeks before admission she had had a similar, but smaller painless vaginal haemorrhage, which had lasted 18 hours but for which she had not sought medical advice. Symptoms suggestive of early pregnancy had been present but had diminished during the two weeks before admission.

Her general condition was good; abdominal examination showed no obvious abnormality apart from very slight suprapubic tenderness. Vaginal examination confirmed that she was bleeding briskly; findings on digital examination suggested that there were products of conception within the cervical canal, and it was also noted that the uterus was only slightly enlarged, with no masses in the appendages. Speculum examination confirmed the presence of a mass resembling products of conception in the cervical os, but attempted removal with sponge-holding forceps simply caused further bleeding. The patient was therefore transferred immediately to the operating theatre.

At operation, an intracervical mass, about 4 cm in diameter was found; it was visible through the partly dilated external os, and was adherent to the thinned-out cervix. There was heavy bleeding from a punctum on this mass. After clamping each side of the cervix to occlude the lateral cervical blood vessels, the intact internal os was dilated using Hegar's dilators and the uterine cavity curetted. The mass was carefully dissected free from the...