SHORT CASES IN CARDIOLOGY

A young mother with severe chest pain

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A 29 year old previously healthy woman was admitted to hospital with severe chest pain and dyspnoea on the fourth postpartum day. She was given bromocriptine orally (2.5 mg twice daily) to suppress lactation. Admission electrocardiogram revealed an acute anterior myocardial infarction. Immediate coronary angiography showed a spontaneous dissection of the left

main and left anterior descending artery (LAD) (fig 1A), an otherwise rare cause of myocardial infarction, with a consecutive proximal LAD occlusion (fig 1B). Emergency coronary bypass grafting was performed. On the 13th postoperative day the patient was discharged free from symptoms.

Myocardial infarction in the puerperium is rare and carries a serious prognosis. In more than 50% of these patients spontaneous coronary artery dissections were documented, an otherwise rare cause of myocardial infarction.¹ In most instances the diagnosis was established postmortem.² Degenerative morphological changes of the artery wall with an accumulation of amorphous intercellular material most probably induced by hormonal influences have been documented at the site of dissection and may be associated with the "softening" of tissues that occurs before delivery.^{3,4} Additionally, bromocriptine, which has been related to postpartum myocardial infarction, may have provoked coronary spasm leading to the artery wall dissection in our patient.⁵ Unlike usual practice, thrombolytic treatment is not appropriate in most patients with postpartum myocardial infarction and may lead to fatal haemorrhages at the site of dissection. Immediate coronary angiography is essential to establish an early diagnosis, thus allowing a prudent therapeutic decision. However, coronary angioplasty also deteriorates spontaneous coronary artery dissections. Therefore, if conservative therapy is not possible, only emergency bypass grafting in this situation will save a young mother's life. From the viewpoint of a cardiologist, the use of bromocriptine to suppress lactation in the puerperium should be discouraged.

Figure 1 Coronary angiography revealing a long spontaneous dissection (arrows) of the left main and left anterior descending artery (LAD) (right anterior oblique projection) (A) with a consecutive proximal LAD occlusion (left anterior oblique projection) (B).

- 1 Mansur LI, Minns GO, Steckley RA. Postpartum myocardial infarction: association with primary coronary artery dissection. *Cleve Clin J Med* 1995;62:261-8.
- 2 Jorgensen MB, Aharonian V, Mansukhani P, et al. Spontaneous coronary dissection: a cluster of cases with this rare finding. *Am Heart J* 1993;127:1382-7.
- 3 Movsesian MA, Wray RB. Postpartum myocardial infarction. *Br Heart J* 1989;62:154-6.
- 4 Coulson CC, Kuller JA, Bowes WA. Myocardial infarction and coronary artery dissection in pregnancy. *Am J Perinatol* 1995;12:328-30.
- 5 Hopp L, Weisse AB, Ifly L. Acute myocardial infarction in a healthy mother using bromocriptine for milk suppression. *Can J Cardiol* 1996;12:415-18.