Failure of nifedipine treatment in primary pulmonary hypertension

Sir,

In an attempt to emulate the success described by Camerini *et al.* in a recent article in the British Heart Journal,¹ we tried nifedipine in the treatment of a 36-year-old woman who had both clinical and haemodynamic findings of primary pulmonary hypertension.

The patient was studied using a Swan-Ganz catheter; the procedure used by Camerini *et al.* was not changed. The following results were obtained:

Only diazoxide at the lowest dose appeared to decrease total pulmonary resistance significantly. Nifedipine failed to do so. Other trials with molindomine (a new long acting vasodilator) and hydralazine were also unfruitful.

As proposed by Klinke,² drugs used to attempt to treat primary pulmonary hypertension need acute testing before being started on a long term basis; moreover, monitoring of the pulmonary vascular pressure is mandatory to avoid aggravating the condition. We would like to emphasise that whereas primary pulmonary hypertension may occasionally be

ameliorated by various drugs, this response is individual and not the rule.

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Note: This is a further letter to correspondence published in *Br Heart J* 1981; 46: 230-1. Dr Camerini was shown this letter but thought that his earlier letter covered the points now raised in this one by Berkenboom *et al.*

References

- 1 Camerini F, Alberti E, Klugmann S, Salvi A. Primary pulmonary hypertension: effects of nifedipine. *Br Heart J* 1980; 44: 352-6.
- 2 Klinke WP. Treatment for primary pulmonary hypertension. *Am Heart J* 1980; 100: 587-8.

1. Nifedipine (20 mg sublingually)						
	HR (beats/min)	CO (l/min)	$\bar{P}A$ (mmHg)	TPR (dyne s cm ⁻⁵)	$\bar{P}a$ (mmHg)	TSR (dyne s cm ⁻⁵)
Basal	98	4.3	50	929	92	1709
30'	102	4.8	59	982	91	1697
60'	104	4.8	59	982	87	1614
2. Diazoxide (in pulmonary artery)						
	HR (beats/min)	CO (l/min)	$\bar{P}A$ (mmHg)	TPR (dyne s cm ⁻⁵)	$\bar{P}a$ (mmHg)	TSR (dyne s cm ⁻⁵)
Basal	115	3.5	62	1415	85	1940
50 mg	125	4.05	55	1085	90	1775
100 mg	132	4.35	62	1138	87	1598
100 mg	137	4.35	61	1120	82	1506

HR, heart rate; CO, cardiac output; $\bar{P}A$, mean pulmonary arterial pressure; $\bar{P}a$, mean systemic arterial pressure; TSR, total systemic resistance; TPR, total pulmonary resistance.