A Novel Treatment for Idiopathic Oedema of Women

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Dear Sir,

Idiopathic oedema is a common but poorly understood condition, and yet it may have been recognised for more than a century [1,2]. Drugs can usually be avoided if most patients achieve their ideal weight. However, resistant cases may require additional therapy which, up to now, has been difficult to evaluate objectively. The recent description by Ahmad et al. [3] of the variation in pedal skin blood flow with posture at different times of the menstrual cycle using a laser Doppler flowmeter may enable more thorough analysis of therapy. The use of sympathomimetics may be warranted to improve precapillary tone with an added effect on aldosterone secretion [4]. We report a patient who required both enalapril and ephedrine to control her symptoms. To our knowledge, this is the first time such a combination has been used.

The patient, a 44-year-old radiographer, scaling 1.75 m, developed swelling of the legs 13 years ago, following her first pregnancy (weight 70 kg). She presented to her own doctor in 1983 with a 9-month history of worsening oedema with bloating, irritability, and slight giddiness on prolonged standing. There was a diurnal weight variation of at least 2.5 kg and nocturia twice nightly or more. She exhibited no apparent psychiatric instability.

Diuretics were begun, after which she became increasingly breathless and waterlogged (maximum weight 89 kg). Bed rest for a few weeks caused a weight loss of 8 kg. Her symptoms persisted, and a second opinion was sought (haemoglobin concentration was 18.3 g/dl, haematocrit 51.4%, plasma potassium 3.1 mmol/l). Diuretics

were discontinued, hypokalaemia corrected, and a low-salt diet commenced. Despite this, after 3 months, her oedema persisted (weight 76 kg). Ephedrine 60 mg three times a day was started provoking such a diuresis that she lost 3.5 kg in 5 days. The ephedrine was reduced until symptoms were controlled. By March 1985, her weight had fallen to 72 kg, and discontinuation of ephedrine was attempted. She promptly relapsed within 2 weeks (weight kg), and enalapril 20 mg daily was started. Her weight fell to 71 kg within 2 months, but as the oedema remained, ephedrine was reintroduced, and the dose titrated to give maximum benefit. Later in 1985, her weight fell to 65 kg during a period of bereavement, and she attempted to stop both tablets but again relapsed within 2 weeks. Treatment was resumed, and she is currently taking enalapril 20 mg daily and ephedrine 15 mg daily. She weighs kg and feels better than she has done for years.

The use of ephedrine has previously been described in the oedema of diabetic neuropathy [5] and in a case of severe idiopathic oedema [4]. Angiotensin-converting enzyme (ACE) inhibitors have also been successfully used [6, 7], although they have never before been used with ephedrine in this condition. It has been postulated that local renin-angiotensin systems are important in the

control of autonomic tone and blood volume so that ACE inhibitors may not be acting only on the secondary hyper-aldosteronism of idiopathic oedema.

In view of the dramatic response of our patient to ephedrine and enalapril, we feel that further study is warranted particularly using the method of laser Doppler anemometry.

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