

Correspondence

Coughs cause systemic blood flow

Sir.—I read with interest the report by Dr JM Cary and colleagues entitled "Coughs cause systemic blood flow" (March 1984; 39:192-5). Their observation that coughs limited to diastole produce peripheral arterial flow is entirely in agreement with our observations.¹ Our study, however, demonstrated that, unless the precough aortic pressure is very low, the increased intrathoracic pressure during cough merely displaces blood from the central aorta toward the periphery. The aortic valve does not open and thus blood is not "pumped" from the lungs and left heart, as suggested by Dr Cary and others. Such pumping may occur in patients undergoing cardiopulmonary resuscitation, who have very low arterial pressures.^{2,3}

WILLIAM C LITTLE

University of Texas Health Center at San Antonio
7703 Floyd Curl Drive
San Antonio, Texas 78284, USA

- 1 Little WC, Reeves RC, Coughlan HC, Rogers EW. Effect of cough on coronary perfusion pressure. *Circulation* 1982; 65:604-10.
- 2 Rudikoff MT, Maughan WL, Effron M, Freund P, Weisfeld ML. Mechanism of blood flow during cardiopulmonary resuscitation. *Circulation* 1980; 61:3445-52.
- 3 Rosborough JP, Hausnecht M, Neeman JT, Criley JM. Cough supported circulation. *Crit Care Med* 1981; 9:371.

** This letter was sent to the authors, who reply below.

Sir.—We found Dr Little's conclusions interesting. It appears that we agree that coughing during diastole does allow peripheral arterial flow. This flow presumably results from the increased intrathoracic pressure which moves blood from an intrathoracic to an extrathoracic location.

The idea that the aortic valve does not open against a normal head of pressure is reasonable and we appreciate Dr Little's thoughts concerning this. Furthermore, in those patients who are conscious there appears to be a role for coughing to allow the movement of blood from the chest into the peripheral structures. Clearly, the most important issue concerns the function of the aortic valve and the movement of blood in hypotensive patients undergoing cardiopulmonary resuscitation. In this situation the low arterial pressures appear to allow the aortic valve to open during compression of the chest cavity so that blood is actually pumped through the lungs and out of the left heart into the systemic circulation. Thus when these concepts of "new cardiopulmonary resuscitation" are applied to cardiopulmonary resuscitation there is an opportunity to gen-

erate better blood flow. Obviously, these patients usually need definitive defibrillation and this is the treatment of choice once it is available.

JEFFREY M CARY
JOHN BUTLER

Division of Respiratory Diseases,
School of Medicine
University of Washington,
Seattle, Washington 98195, USA

Notices

Fleischner Society: 15th annual symposium

The Fleischner Society will hold its 15th Annual Symposium on Chest Disease, April 11-13, 1985, at the JW Marriott Hotel at National Place, Washington DC. Lectures, refresher courses, and panel discussions will be used to discuss imaging, anatomy, physiology, pathology, and clinical aspects of chest disease. Emphasis will be placed on imaging methods and correlative studies. The registration fee is \$375 before 1 March 1985 and \$400 thereafter. The fee for residents in training is \$250. Further information may be obtained from the Fleischner Society Conference Coordinator, 3770 Tansy, San Diego, California 92121.

International Society for Lymphology

The 10th Congress of the International Society for Lymphology will be held in Adelaide, Australia, from 26 August to 2 September 1985. Further information about the congress may be obtained from Dr JR Casley-Smith, Microcirculation Research Unit, University of Adelaide, Box 498 GPO Adelaide, SA 5001, Australia. The society was formed over 20 years ago to promote knowledge about the lymphatic system, in particular about its structure and function, involvement in disease, and investigation in patients, as well as about the treatment of its deficiencies. More information may be obtained from the secretary general of the society, Professor M Földi, Tullastrasse 72, D-7800 Freiburg, West Germany.

"Sarcoidosis" — a new journal

The first issue of *Sarcoidosis* appeared in September 1984; subsequent issues will appear six monthly. This journal aims to review work on sarcoidosis and other granulomatous diseases and it is edited in association with the International Committee on Sarcoidosis. Further particulars are available from the publishers, Bongraf Italiana srl, Via Curio Dentata 5, 20146 Milano, Italy.