VARIABILITY OF INSPIRED OXYGEN CONCENTRATION WITH NASAL CANNULAS

The paper by Dr EA Bazuyu and others (August 1992;47:609-11) on inspired oxygen concentrations from nasal cannulas ("prongs") is welcome. The potential hazards of nasal oxygen are underappreciated, as we found when asking junior medical staff how they use oxygen during exacerbations of chronic ventilatory failure. This inquiry followed a particularly spectacular example of "prong poisoning," where nasal oxygen at 1 litre per minute delivered an Fio2 conservatively estimated at 40%. Nearly half the doctors we asked thought nasal oxygen was as good as or better than a Venturi mask in these circumstances, and only one appreciated that nasal cannulas deliver an Fio2 which can rise as respiratory failure worsens and ventilation falls. Our case suggests the support of Dr Bazuyu and colleagues that nasal cannulas may be more hazardous during acute exacerbations of ventilatory failure, and sustains their statement that nasal cannulas are "unsatisfactory if precise control of inspired oxygen is desired.

Randomised clinical trial of chest drainage systems

We should like to comment on the article by Dr ANJ Graham and others (June 1992;47:461-2). The study sample consisted of only postoperative cases, though the authors have extended the recommendation of a Portex drain to trauma and emergencies where the risk of tube blockage is higher and low pressure negative suction is invariably required. In selecting their sample the authors have excluded patients who would require suction, but in the discussion they have analysed the requirement of suction in two groups. This would be a major confounding factor in the study. The reasons for reduction in "time to sitting" and in morbidity with a Portex drain, although drainage with bottles was adequate, are not discussed. As the drainage systems were not "blind" and there was variable encouragement for mobilisation by the nursing staff, there is scope for a bias for mobilisation of the two study groups and thus in the observations. The major factors in the early mobility of patients and discharge would be the type of underlying and associated illness and complications. Considering the requirement of suction and the possibility that Portex tubes can fail out, the authors' recommendations need further evaluation.

Barcelona's asthma epidemics

With regard to Dr C Picado's "For Discussion" paper (March 1992;47:197-200), we propose that exogenous 15-lipoxygenase enzyme from soybean modulates the severity of the asthma response in soybean induced asthma, since soybean is the world's richest known source of lipoxygenase enzyme and is causal in epidemic asthma with the unusual clinical features described by Dr Picado. 

Pharmacological and immunological considerations, particularly those related to the pathophysiologic mechanisms of asthma and the use of soybean Lipoxygenase (5-15HETE) in the clinical setting, provide a basis for developing new therapeutic strategies to modify the inflammatory and immune responses in asthma. This may be achieved through the use of specific inhibitors of soybean Lipoxygenase (5-15HETE) or by modifying the immune response to the enzyme. A better understanding of the role of soybean Lipoxygenase (5-15HETE) in asthma will enable the development of more effective therapeutic approaches for the management of this disease.

Latin American conference on cystic fibrosis

The fifth Latin American Cystic Fibrosis Conference is to take place in Recife, Brazil, on 3-7 April 1993. Further information can be obtained from Dr Perez, the conference coordinator, of the Instituto de Biologica, 70620-970, Recife-PE, Brazil.