

## Literature Briefs

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Literature Briefs were submitted by Drs. R. Clark, B. Das, M. E. Edwards, A. Goldblatt, N. G. Goudsouzian, J. R. Harp, J. Levitt, and J. Reitan. Briefs appearing elsewhere in this issue are part of this column.

### Paramedical Services

**HELICOPTER AMBULANCE** A number of agencies and organizations in Maryland have cooperated in the development of an 'Air Med-Evac Helicopter System.' The purposes of the system are the transport of patients with life-threatening injuries from accident scenes, inter-hospital transfer of critically-ill trauma patients, emergency inter-hospital transfer of other patients at the request of the treating physician, and transport of premature infants, emergency medical personnel, medical supplies, and organs for transplant. The four specially-equipped helicopters are operated by highly-trained members of the Maryland State Police, and each is assigned to a specific geographic area. Although Med-Evac missions receive the highest priority, they account for only 10 per cent of helicopter use. This situation has resulted in a cost of \$44 per transported patient, which is considered quite economical. The principal health care facility involved is the Maryland Institute for Emergency Medicine, which is adjacent to the University of Maryland Hospital. Special centers for the care of newborns and burn patients are also involved. The basic philosophy underlying the development of this system is that better care can be provided for seriously injured patients by the concentration of medical personnel and facilities in a regional center and the development of a rapid air transport system than by increasing the capabilities of local hospitals. An extensive communication system gives the hospital advance information about the patients and permits preparation of the facilities and gathering of appropriate medical specialists. Owing to an extensive educational program and to guidelines worked out by representatives of police, ambulance services, and

physicians, there is good cooperation between the surface and air emergency services. These guidelines, which were adopted by The Maryland Department of Health and Mental Hygiene, detail the roles of ambulance attendants and helicopter crews at accident scenes and specify which patients are to be taken to local hospitals and which to the Maryland Institute for Emergency Medicine. In the future, the author will report the effect of current practices on survival rates. (Cowley, R. A.: and others: *An Economical and Proved Helicopter Program for Transporting the Emergency Critically Ill and Injured Patient in Maryland. J Trauma 13: 1029-1038, 1973.*)  
**ABSTRACTER'S COMMENT:** This paper is required reading for anyone involved in the delivery of emergency medical care.

### Respiration

**PULMONARY INFECTION** Tracheobronchial saline washings taken through the endotracheal tube at operation in 151 patients undergoing abdominal surgery were cultured. Incidence of bacterial colonization of the lower respiratory tract was correlated with history of bronchitis, pulmonary function test results, and postoperative pulmonary infection. Pathogenic organisms were found in 4 per cent of patients without and 22 per cent of patients with a history of bronchitis. Similar correlation existed with pulmonary function tests. Postoperative pulmonary infection occurred in 2 per cent of patients having no lower-respiratory-tract pathogens cultured and in 54 per cent of patients having pathogens. In four of six instances, the organism identified by culture was identical to the organism causing infection. The authors recommend culture of tracheobronchial washings at the time of operation in all cases of patients having a history of bronchitis. (Schlenker, J. D., and Hubay, C. A.: *Colonization of the Respiratory Tract and Postoperative Pulmonary Infections. Arch Surg 107:313-318, 1973.*)