

HOUSE STAFF CHANGES With the rising salary scale for house staffs, hospitals are asking questions regarding service vs. education and how large training programs will be financed in the future. One hospital reported its total annual budget for house staff ranged from four to five million dollars per year, which represented approximately ten dollars per patient day. Some hospitals are limiting further expansion of their house staffs. Spiraling costs may hasten greatly a definitive study of the training time needed for internship and residency and may result in some time reduction. The upward trend in salary budgets will bring us very quickly to some new approaches and perhaps, better answers. (Rourke, A.: *High Costs of House Staff May Bring Some Changes*, *Mod. Hosp.* 112: 128 (March) 1969.)

GAS ENDARTERECTOMY A bolus of carbon dioxide injected into the wall of an artery will dissect free the normal outer layer from the diseased media, intima, and thrombotic core. A 26-gauge needle is inserted briefly into the artery, with CO₂ flowing at 10 to 15 l/min at 300 to 400 mm Hg pressure. The administration of 15 ml of CO₂/kg body weight into an artery produces no ill effects. The solubility of CO₂ at body temperature is 20 times greater than that of oxygen or air. The absorption coefficient for carbon dioxide is 0.592 at 35 C, while that for oxygen is 0.024. (Baron, H. C., Schwarz, A. W., and Rodrigues, R. J.: *Gas Endarterectomy in the Treatment of the Ischemic Lower Extremity*, *Arch. Surg.* 98: 754 (June) 1969.)

PULMONARY COMPLICATIONS A prospective study of postoperative pulmonary complications in 200 patients who underwent surgical operations on the upper abdomen was carried out. Postoperative complications were defined as the presence of atelectasis or pneumonia on roentgenographic examination. One hundred patients were controls; 50 patients received IPPB with saline solution and 50 received IPPB with 1:1,600 isoproterenol. The IPPB was used for 15 minutes, four times a day, at an inspiratory pressure of 15 cm H₂O. There was no demonstrable benefit from either type of treatment. Roentgenographic abnormalities were present in about 50 per cent of cases and clinical signs were present in 30 per cent of cases. (Baxter, W. D., and Levine, R. S.: *An Evaluation of Intermittent Positive Pressure Breathing in the Prevention of Postoperative Pulmonary Complications*, *Arch. Surg.* 98: 795 (June) 1969.)

PREGNANCY AND HEART SURGERY The combined experience of a large number of cardiovascular surgeons was pooled to evaluate the risk of open-heart surgical operations during pregnancy. The total number of cases collected was 20, with one (5 per cent) maternal death and seven (33 per cent) fetal deaths. The data showed no correlation of pump type, perfusate, or perfusion time with mortality. When cardiac operations are necessary, they should be performed as soon as possible. Theoretically, surgical operations should be done after 24 to 28 weeks, when organogenesis is complete. However, when cyanotic heart disease is present, earlier operation may be indicated because of the increased incidence of congenital defects and increased maternal risk at delivery with cyanotic heart disease. Following the surgical operation, management of pregnancy is routine. If valve replacement has been done, anticoagulation usually will be instituted, with heparin as the drug of choice since it does not cross the placenta. Cesarean section should be performed for obstetric indications only. (Zitnik, R. S., and others: *Pregnancy and Open-heart Surgery*, *Circulation* 39: 257 (May—Suppl. 1) 1969.)