investigators, make for constantly changing vistas concerning disease in general and certain diseases in particular.

All physicians should be receptive to changing points of view in medical practice, although it is granted, in the routine of daily responsibilities, this is, at times, a quite difficult ideal to attain; and especially so, when absence from one's home city, in order to participate in refresher courses, may be for various reasons, practically out of the question.

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The Institution of a Clinical Conference or Postgraduate Course.—It is just here that clinical conferences held under local auspices may be of real worth to many practitioners. As has been so often stated, all that is needed, to carry through a successful conference, is the support and leadership of one or more members of a county society postgraduate committee, who will give earnest attention to the formulation and completion of a program that has been arranged in harmony with local facilities and needs. The California Medical Association Committee on Postgraduate Activities, through its chairman and secretary, is anxious to give all possible cooperation, not only through aid in the selection of guest-speakers on desired topics, but in supplementary publicity of courses, so that every physician in the territory included in a clinical conference plan may be informed.

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Plans for Clinical Conferences Are Now in Order.—Newly elected officers of each county society are urged to discuss with their governing boards and members the possibility of instituting a postgraduate conference to be held some time during the January-April period. A first requirement is that every county medical society shall have appointed a postgraduate committee, whose members, in turn, will promptly communicate with the California Medical Association Committee on Postgraduate Activities, even though nothing more is requested than advice on how best to proceed.

Every one of the forty component county units of the California Medical Association has some members who would gladly attend a postgraduate or clinical conference if it were made locally available; and, it may be added, all members of every county medical society profit through attendance at conferences where local and other colleagues are contacted, and mutual problems are discussed. The California Medical Association Committee on Postgraduate Activities, 450 Sutter Building, San Francisco, invites correspondence.

Other State Association and Component County Society News.—Additional news concerning the activities and work of the California Medical Association and its component county medical societies is printed in this issue, commencing on page 28.
have taken the initiative in the solution of this important therapeutic problem.

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ENDOCAVITARY ASPIRATION OF TUBERCULOUS PULMONARY CAVITIES

Attempts to close tuberculous pulmonary cavities by means of prolonged endocavitary aspiration were first reported in July, 1938, by Dr. Vincenzo Monaldi of the Forlanini Institute of Rome. Continuing this research, which was more fully detailed in subsequent articles, he and his pupils have now performed the procedure upon over 150 patients, with remarkably good results.

The Monaldi procedure begins with careful selection of suitable cases, after repeated unsuccessful attempts to induce artificial pneumothorax prove that the pleural leaves are firmly adherent, especially in the area where the puncture is to be done. The cavity is exactly localized by means of x-ray. The puncture proper is done under procain anesthesia, employing a special Y-shaped cannula with a trocar, with which, under manometric control, a soft rubber catheter is introduced through the chest wall into the cavity. A suction pump is attached to the catheter. The suction is kept up continuously or intermittently for weeks or months, depending upon the behavior of the cavity.

Cavity aspiration differs from the surgical procedures generally used in the treatment of pulmonary tuberculosis in that it does not depend upon compression of lung or cavity, but rather upon reexpansion of the lung to fill in the excavated portion. This may be accomplished by reaeration and reexpansion of atelectatic tissue, by reabsorption of alveolar exudate and consequent recovery of elasticity of the tissues involved by the exudation, and by compensatory emphysema of normal pulmonary tissue in the vicinity of the cavity or even in more distant parts of the lung. These mechanisms are favored by the establishment of a negative pressure within the cavity. Another result of the treatment is the drainage of pus, blood and bits of necrotic tissue, with their high bacillary content, bringing about, so to speak, a sterilization of the cavity. Sputum conversion and disappearance of cavity, with improvement in the patient's general condition, are reported in a large proportion of the cases.

The presence of homolateral tracheobronchial disease is not a contraindication; on the contrary, a partially occluded bronchus is an aid to obtaining negative suction within the cavity. Since there is little operative reaction the puncture can be done on toxic, febrile or older patients, and in the presence of progressive contralateral disease. It has been performed in conjunction with collapse measures on the same and other side, even with homolateral pneumothorax, when limited to a part of the lung distant from that operated upon.

Other direct therapeutic approaches to tuberculous cavities previously attempted have included open surgical drainage,7 insertion of metal trocar or needle, leaving it in situ with no suction or short periods of suction,8 endobronchial aspiration,9 plugging of bronchi by means of bronchoscopy,10 and cautery of bronchi with intent to create stenosis, using a thoracoscope introduced into the cavity.11 The results of cavity aspiration in the cases begun at the Olive View Sanatorium since September, 1939, have, so far, been promising.12 Olive View Sanatorium.

EDWARD KUPKA,
Olive View.

1 De Cerenville, Tuffier, Eloesser, Haight, and others.
6 Kupka, E., and Bennett, E. S.: American Review of Tuberculosis, 43: No. 5 (November), 1940.

Journal Recommends Nurses' Schools Should Teach Industrial Hygiene.—Courses in industrial hygiene for undergraduate and graduate students should be started at once by schools of nursing, The Journal of the American Medical Association declares in an editorial which points out that with the speeding up and intensification of industry now taking place in connection with the national preparedness program many more industrial nurses will be needed than are now available.

"Competent industrial health service depends on the availability of physicians adequately trained in industrial medicine, hygiene and traumatic (injuries) surgery," The Journal says. "Ordinarily, however, assistance is necessary from other properly qualified professional personnel. Industrial medical departments provide excellent opportunities to nurses with proper aptitude, good comprehension of public health nursing methods and a sure sense of their own professional limitations. A clinical and administrative assistant of this character will be of immense aid to any industrial physician in the performance of many routine functions which make up the bulk of industrial dispensary procedure. The system works admirably under whole-time industrial physicians or under part-time physicians who spend regular visiting hours at a plant. In the absence of direct medical supervision, written standing orders, properly posted in the plant medical unit, will do much to inhibit assumption of services which require expert medical attention. Some form of medical supervisory arrangement is necessary to provide nurses with technical advice. The physicians on call for first aid and compensation work may be most helpful, particularly if they have some insight into the actual working environment."

The body requires mineral elements for growth, repair and regulation of body processes.