

ABSTRACTS

Editorial Comment: Material for this section is not abstracted in a uniform style. Many employ direct quotations only. Others are written in the more conventional form. At times there may be included a few opinions, personal to the abstractor, which, where they appear, will be bracketed or labeled "Comment." The Editorial Office continues in its desire to receive correspondence from readers relative to the management of this section.

GREEN, M. W.; VEITCH, F. P., AND KOPPANYI, THEODORE: *Studies on the Barbiturates. XXVI. The Use of Lloyd's Reagent in the Quantitative Estimation of Barbiturates in the Urine.* J. Am. Pharm. A., Scient. Ed. 32: 309-311 (Nov.) 1943.

"The estimation of barbiturates in urine by the Koppányi test as originally developed may be rendered difficult by the presence of chromogens in chloroform or ether extracts of urine which tend to mask the color developed, and by the actual reaction of the cobalt reagent with certain other substances, to produce colored complexes. . . . This investigation was undertaken with the purpose of producing chloroform or ether extracts of urine free from chromogens, and to show how reactions due to substances other than barbiturates may be eliminated. . . . The determination of barbiturates in the urine is rendered more precise by the use of Lloyd's reagent which adsorbs pigments and other chromogens without removing the barbiturates. The cobalt-isopropylamine test has been adapted to spectrophotometric estimation of barbital, and it has been shown that the test obeys Beer's law in concentrations up to 30 mg./100 cc. The following directions represent the most recent modification of the detection and estimation of barbiturates in the urine. (a) Add 5 cc. of a 5 per cent solution of sulfuric acid and 2 Gm. of Lloyd's

reagent to 20 cc. of urine in an Erlenmeyer flask. Shake thoroughly for 10 min. (b) Filter and shake an aliquot of filtrate with at least 10 volumes of ether in equally divided portions. (c) Evaporate the combined ether extracts and dissolve the residue in a convenient volume of chloroform. (d) Test the chloroform extract for barbiturates in a standard colorimeter or spectrophotometer using methods previously prescribed." 8 references.

J. C. M. C.

HERSHEY, S. G., AND APOGI, EVELYN: *The Anesthetic Management of Aged Patients with Fractured Neck of the Femur.* New York State J. Med. 44: 183-188 (Jan. 15) 1944.

"Fracture of the femur is among the more common conditions for which surgery is undertaken for the aged. . . . Although the tendency toward early operation is growing, surgery is generally delayed until the patient's condition is satisfactory or improving. Shock is treated. Fluid-electrolyte balance, cardiac and renal status are appraised and appropriately handled. This care is extended to the postoperative period. . . . The various problems the anesthetist must solve satisfactorily might be listed. These are: (a) pain relief, (b) protection against uncomfortable positions and restlessness, (c) adequate muscular relaxation, (d) maintenance of normal physiological functions, especially in the presence of