

## ANTIBIOTICS

A.B.G.

The biweekly *Medical News, A Newspaper for Physicians*, in its issue for September 23, 1957, presents a special report entitled, "Surgeons Link Infection Rise to Use of Antibiotics". Three thousand consecutive cases under orthopedic surgery which were given "routine antibiotic prophylaxis" are reviewed by Dr. Mihran O. Tachdjian and Dr. Edward L. Compere of Chicago Wesley Memorial Hospital and Northwestern University, the purpose of the routine being to avoid infection of the wounds.

In a period of six months there had been eight major post-operative infections. The 3,000 cases showed no indication calling for antibiotic prophylaxis, but it was given in 1,900 and not given in 1,100. The rate of infection where antibiotics were used was 5.9% ; where antibiotics were not used, 2.6%. When the antibiotic employed was penicillin, the rate of infection was 13.2%. Out of 44 infections classified as "major"—meaning, according to the report, tissue destroying or suppurating—36 occurred in patients receiving antibiotics to guard against infection. That meant 8 major infections came without antibiotics. These eight responded well to the normal steps taken in treatment. The antibioticly treated 36 included one fatality, one requiring amputation, fifteen who needed additional surgery, and six still ill when the report was made. On analysis, the surgeons found infection following operation in 4.7% of the patients given antibiotics and 0.73% in patients not given antibiotics.

Going a step further, the surgeons came to suspect strongly that the use of antibiotics caused strains of organisms to emerge that hitherto had not been "very pathogenic" but now became virulent, so that there were "superinfections" within the wound and elsewhere in the body.

(Continued on page 86)