"Encouragement of the use of such 'fixed-dose' antibiotic mixtures and the manner in which they are being exploited represent a major backward step in the management of infections."

Recommendations

The above discussion indicates that the contraindications for the use of any sulfonamide-penicillin combination by the oral route far outweigh any indications for such use. These data from the more recent literature are amply supported by editorial comments from the literature of the early 1950's. With all these at hand, it is strongly recommended that use of these fixed combinations should no longer be recommended.

PENICILLIN-STREPTOMYCIN

This combination was considered to be ineffective or ineffective as a fixed combination for the following claims:

I. Bacterial Endocarditis in patients with:
   A. Penicillin-susceptible streptococcal endocarditis (0.1 mcg/ml or 0.1 unit/ml or less).
   B. Endocarditis due to enterococci or other streptococci not sensitive to 0.1 mcg/ml or less.
II. Lung abscess
III. Aspiration pneumonia
IV. Mediastinitis
V. Peritonitis
VI. Mixed wound infections and abscesses
VII. Abdominal surgery in a contaminated area
VIII. Gonorrhea
IX. Urinary tract infections
X. Middle ear infections and mastoid infections
XI. Bronchiectasis, bronchitis, and other respiratory infections
XII. Brain abscess
XIII. Osteomyelitis
XIV. Secondary infections in patients being treated for tuberculosis
XV. Other infections in which the causative agent cannot be identified without operative procedures

GENERAL COMMENTS ON REVIEW OF INDICATIONS

These fixed combinations will usually not provide optimal therapy for the complex clinical problems encountered with these conditions. In each case, the characteristics of the invading organism and the results of *in vitro* bacterial sensitivity tests must be known. Many of these infections could be treated with penicillin alone, with penicillin and streptomycin in a different ratio, or with other antimicrobial agents.

Judgment of the Panels (Anti-Infective II and IV)

The availability of fixed combinations of streptomycin and penicillin has—

1. Led to inappropriate use of these drugs for treatment of disease states in which the combination is no more effective than one of the components or in which the fixed combination is not the treatment of choice;
2. Exposing the patient to the increased toxicity inherent in a combination without increasing the benefit;
3. Denied flexibility of the dosage of the components;
4. Ignored the marked changes in the pattern of bacterial susceptibility in recent years and the development of new and better antimicrobial agents; and
5. Ignored the availability of penicillin and streptomycin individually for combined use at the discretion of the physician.

These considerations and the limited indications for these combinations have rendered fixed-dosage forms of penicillin and streptomycin of little value in therapeutics. Accordingly, the Panels seriously question whether they still belong in the therapeutic armamentarium. It is the judgment of these two Panels that the use of these fixed combinations should no longer be recommended and that the physician should continue to use the individual components according to his best clinical and laboratory information.

I would like to add several points to the above comments. There may be special instances where fixed combinations are of value. These include the com-