

tions is mixed bacterial infection. Then we mentioned that various mixed bacterial infections, including bronchiectasis, a condition of the lung; peritonitis, inflammation of the abdomen; urinary tract infection and chronic infection of the ears. These are the common diseases that can be caused with the infection of more than one kind of bacterium. Because many bacteria cause these infections, and because the bacteria are commonly very resistant to antibacterial therapy, treatment should not be started until appropriate cultures and sensitivity tests have been initiated.

I would like to digress on this point of appropriate cultures and sensitivity. This does not mean that a physician has to withhold therapy until he has very last bit of information from the laboratory.

All we ask is that he obtain the material so that it can be in process during the period of time that he has to make the initial clinical judgment. He doesn't have to withhold therapy or restrain his treatment. And he can treat his patient right away. But prior to that point he should prepare himself for having to change his mind on the basis of laboratory evidence.

In many instances, however, therapy need not be started until these data are determined. In other words, the patients aren't that sick, thus allowing the use of specific and effective agents. It is highly doubtful that oral penicillin-sulfonamide mixtures would ever be the drug of choice in the conditions that I have just listed above.

I cite Dr. Weinstein here in terms of his own studies of so-called broad spectrum effect of the penicillin sulfonamide combinations.

He has done some studies, and he just feels that there is really no evidence for that.

Another claim made by the manufacturers is that the penicillin and sulfonamide produce an enhancement of antibacterial activity. There are many circumstances where we use drugs in combination, that is, individual drugs in combination. We have no objection to the use of individual drugs in combination. We cite certain conditions in which it is valuable to use individual drugs in combination. One is tuberculosis, and another is endocarditis, which is an infection of the heart valves, and in certain types of urinary infections.

But in these particular examples the combinations are never penicillin and sulfonamide. They are usually penicillin and streptomycin for one of these and other variations, but never penicillin and sulfonamide.

There is never any justification for this particular fixed combination.

We also note that when you mix two drugs you can have an additive effect, you can have what we call a synergistic effect, where the action is greater than the sum of the two, or you can have an antagonistic effect. One problem that disturbs us is that there is also a potential for antagonism, and you may get less for your money than you might anticipate.

Another argument used by the manufacturers is that it is good to have drugs to use when you don't know what is wrong with the patient, and you sort of have to give blind therapy. We acknowledge this, this is true.

There are indeed valid indications for the use of drug combinations, particularly in infection of the newborn. Dr. Eichenwald is an expert in this area. He wanted to be sure to mention the newborn here.