

MULFORD

**ANTISTREPTOCOCCIC
SERUM POLYVALENT**

AND

**ANTISTREPTOCOCCIC
SERUM CONCENTRATED**



Pasteur¹ first cultivated the streptococcus in 1878 and for many years attempts have been made to combat infections with antistreptococcic serum. In 1895 Marmorek² produced a serum that was supposedly valuable in the treatment of all types of streptococcus infections, and recent investigation³ has shown that by the early use of antitoxic streptococcic serum there is a marked reduction in the mortality and residual pathologic changes.

CLINICAL INDICATIONS

Antistreptococcic Serum Polyvalent or Antistreptococcic Serum Concentrated is indicated in the specific treatment of acute primary or secondary streptococcus infections, associated with streptococcus septicemia, bacteriemia or pyemia occurring in streptococcus pneumonia, puerperal sepsis, septic sore throat, streptococcus meningitis, cellulitis, sinusitis, otitis, empyema and post-operative infections (a group usually caused by hemolytic streptococci); or in circulatory and heart infections, genito-urinary infections and rheumatic conditions (a group usually caused by streptococcus viridans).

Williams⁴, Bailey⁵ and Hansen⁶ report beneficial results from the use of Antistreptococcic Serum in the treatment of pyemia. In general, the serum has been found particularly effective in cases of acute

and spreading infections with marked toxemia. Rosenberg and Nottley⁷ state that this serum is of definite value in the treatment of streptococcus meningitis while Amoss and Craven⁸ found it to be definitely effective in the treatment of hemolytic streptococcus pneumonia.

HOW PREPARED

Antistreptococcic Serum Polyvalent is the unconcentrated serum of horses highly immunized by injections of selected virulent strains of streptococci, hemolytic and viridans.

Antistreptococcic Serum Concentrated is obtained by separating and refining the globulins contained in Antistreptococcic Serum Polyvalent.

The cultures of streptococci selected for immunization of horses are obtained from a wide variety of severe or fatal human streptococcus infections including cases of puerperal sepsis, erysipelas, septic sore throat, pneumonia, mastoiditis, meningitis, etc.

The virulence of the original cultures of streptococci is enhanced by repeated passages through mice. The key strains, for immunization of horses are selected from these virulent cultures by their antigenic power to produce protective antibodies against the enhanced virulent strains, as shown in animal protection tests.

STANDARDIZATION

The potency of Antistreptococcic Serum Polyvalent is determined by mouse protection tests.

The standard of potency of Antistreptococcic Serum Polyvalent is such that each cc. protects a white mouse against the injection of at least 10,000 minimum fatal doses of a highly virulent culture.

DOSAGE AND ADMINISTRATION

The essential of success in the use of Antistreptococcic Serum Polyvalent in streptococcic infections require that the serum should be given in large doses as early in the infection as possible and by intramuscular or preferably intravenous injection.

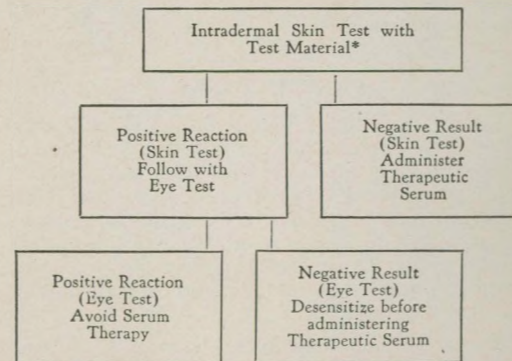
In the use of Antistreptococcic Serum Concentrated, doses should be one-third or one-fourth the dose of the unconcentrated serum.

The importance of large doses of serum in streptococcus infections has been emphasized by the successful treatment of cases of puerperal sepsis and septicemia, using Antistreptococcic Serum in daily doses as high as 200 to 400 cc. and with a total dosage of 1000 to 1200 cc.⁹

PRECAUTIONS

Fantus¹⁰, states "In a number of diseases, serum therapy is life saving and hence obligatory; in some instances intravenous injection of the serum is the only mode of administration by which therapeutic results can be obtained. In some—fortunately rare—cases, serious sickness and even death may result from serum administration, particularly when improperly given by the intravenous route."

It is important therefore that tests for serum sensitivity should be made. The following outline is supported by the current literature. No mention is made of the scratch skin test because of its limited value and of the necessity of following it with the intradermal and eye tests.



* Test material consists of a 1:10 dilution in physiologic saline of normal equine serum.

The Intradermal Skin Test: Inject into (not under) the skin not more than .02 (two one-hundredths) cc. of the test material. Evaluate result in 10 minutes. A positive reaction consists of an urticarial wheal surrounded with a zone of erythema.

Eye Test: Evert the lower lid of one eye and place a few drops of the test material on conjunctiva. Release the lid of eye. During the following 10 minutes occasionally evert both lids and compare tested with untested eye. A positive reaction consists of congestion of conjunctival vessels, lacrimation and itching. Apply a few drops of epinephrine solution 1:1000 immediately to test eye showing a positive reaction.

The remainder of the test material may be used in the preliminary desensitization. The completion of the desensitizing treatment should be accomplished with dilution of the therapeutic serum.

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HOW SUPPLIED

ANTISTREPTOCOCCIC SERUM POLYVALENT

Syringe Package

M 50-012. 20-cc. syringes with accessories.

Intravenous Package

M 50-010. 50-cc. double-end vial with one complete intravenous outfit for intravenous or intramuscular injections.

ANTISTREPTOCOCCIC SERUM CONCENTRATED is supplied in 10-cc. syringes.

M 78. One 10-cc. syringe with glass-encased sterile needle

NOTE.—These products are to be used only by or under the direction of a physician.



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