BACTERIOSTATIC AND FUNGISTATIC ADDITIVES

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An article published in this Journal, March, 1959 (pages 53-57), described the early testing of Corobex "CP" as a bacteriostatic and fungistatic additive in polyester laminates. Tests conducted at Bendiner and Schlesinger, Wells Laboratories, Hudson Laboratories, Inc., Veterans Administration New York Regional Office Clinical Laboratory and the Walter Reed Army Medical Center at various times up until July 21, 1959 were designed to determine the effectiveness of the anti-bacterial additive Corobex as well as that of hexachlorophene, an additive which is now commonly used in soaps, toothpaste, etc.

Our findings in the early evaluations were inconsistent but yielded some positive indications; thus, it was decided to perform additional tests. The second evaluation series showed excellent bacteriostatic resistance with increasing Corobex concentration. However, test results for fungistatic effectiveness were still inconsistent.

Later, the Army Prosthetics Research Laboratory assisted by arranging for separate tests at Walter Reed. Corobex and hexachlorophene were both examined for bacteriostatic effectiveness and the duration of such activity. Corobex incorporated into polyester resin laminates exerted bacteriostatic action on staphlococcus aureus for a period of 21 days. The polyester resin laminates containing hexachlorophene exerted this activity for a period of over 68 days but with a decreasing effectiveness with time.

Although tests indicated some anti-bacterial effectiveness from these polyester resin laminate additives, the bacteriostatic activity has a restricted duration. If amputees are encouraged to use routinely those commercially available soaps, lotions, and powders containing bacteriostats, we see no need for a relatively short-lived anti-bacterial additive in resin laminate appliance parts.

References

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