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MICROBIAL COLONISATION AND ANTIBACTERIAL RESISTANCE OF DIFFERENT TOYS FROM DIFFERENT ENVIRONMENTS

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The aim of this study is to search for colonisation of pathogenic microorganisms on toys found and used in different environments.

Evaluation of microbial growth and antibiotic resistance in 285 cultures taken from toys are done. Cultures are first taken onto a carrier media using 2 wet swabs that are rubbed on all sides of a toy together and at the same time. Cultures are then transferred to a fungal and bacterial media.

Growth was detected in 31% of cultures taken from 285 different toys; this rate was 38.6 % in hospital toys, 28.7 % in day care center toys while 23.3 % in house toys. The most common microrganisms detected were coagulase negative staphylococcus with 29% and Staphylococcus Aureus with 20%. When growth was compared among different kinds of toys, it was most commonly detected in cultures taken from furry toys with 42%; this rate was 39.7% in washable while 28.5% in nonwashable toys. In all the places cultures were taken from, highest resistance was against penicillin with a ratio of 90-100% while it was lowest against vancomycine and teichoplanin.

When all these results are considered it is concluded that pathogenic microorganisms can be detected on toys and these toys can be infected again and again from ill children carrying the potential to transmit this infection to other children. Special care should be given to toys used by ill children or shared by many children.