

Leukemia in the Gibbon

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OBJECTIVE: The objective of this study is to determine the incidence of leukemia in the gibbon colony, characterize clinically and pathologically this disease in the gibbon, and to evaluate its transmissibility.

DESCRIPTION: Gibbons in the SMRL animal colony are screened periodically to detect developing cases of leukemia. Gibbons in which leukemia has been detected are placed under close observation and clinical, hematological, and pathological methods are employed to characterize the development of the disease. Necropsies are done on gibbons that die and tissues from them have been inoculated into gibbons and other laboratory animals to determine if the disease is transmissible.

PROGRESS: Two additional cases of granulocytic leukemia were detected in the gibbon colony during the report period. Clinical, hematological, pathological studies have shown the 2 cases are similar to those observed in earlier cases. A bone marrow suspension from one of the gibbons was inoculated intraperitoneally into 2 baby gibbons, 2 stumpy tailed monkeys, mice, hamsters, and guinea pigs. No changes suggestive of leukemia have occurred in any of these animals except for one gibbon. One baby gibbon died 3 months after inoculation as a result of a laboratory accident. The second young gibbon developed a disease which was identical to that observed in the spontaneous cases of granulocytic leukemia seven months after it was inoculated. A manuscript describing the above events is now being prepared for publication.