

**BIRTH CONTROL IN FEMALE JAPANESE MACAQUES AT ARASHIYAMA MONKEY PARK**K. Shimizu*Okayama University of Science, Okayama, Okayama, Japan**Presenter's Email: shimizu@zool.ous.ac.jp*

Animal populations primarily have been kept within the limits of food supplies and habitats. However, under certain circumstances, uncontrolled increases in population occurs in some species throughout the world, and have caused social problems. Though various measures for population control have been taken, these methods have only transient effects. Moreover, these methods are not always socially acceptable from a standpoint of animal welfare. Synthetic progesterone is commonly used in contraception and hormone replacement therapy in women. In this study, we investigated the effects of administration of synthetic progesterone for contraception in female Japanese macaques. In Experiment 1, the effects of synthetic progesterone on suppressive of menstrual cycles and ovulation were studied in female Japanese macaques at the Primate Research Institute, Kyoto University. After treatments, their menstrual cycles completely disappeared and anovulation persisted. In Experiment 2, multiparae female Japanese macaques living in Arashiyama Monkey Park, Kyoto, Japan were used for behavioral and contraceptive studies. They received a single injection of synthetic progesterone in early autumn. They did not exhibit copulatory behaviors during the following breeding season, and did not deliver during the subsequent birth season. In Experiment 3, we treated synthetic progesterone orally to multiparae female Japanese macaques of the same troop. Most of these monkeys did not show delivery during the subsequent birth season. This study indicates that treatment of synthetic progesterone is one of the effective strategies for fertility control in Japanese macaques. This hormone-induced sterility is reversible; the females eventually returned to normal cycles and experienced normal pregnancy.

Keywords: Japanese macaque, progesterone, contraception, Arashiyama monkey park