

Toxoplasmosis scare: Cat lovers upset

Toxoplasmosis has been recognized for some time as a common parasitic infection in man and warm-blooded animals. The infection generally runs a mild course, often with no noticeable symptoms, although in some persons it may cause illness resembling infectious mononucleosis. There have been reports that, in rare instances, chronic toxoplasmosis may cause heart, brain or eye damage. An estimated one-fourth of American adults have antibodies indicating infection at some time and are presumed to be immune to further infection.

In 1970 Jacob Frenkel, J. P. Dubey and Nancy Miller, at the department of pathology of the University of Kansas Medical Center, conclusively showed that eggs of the toxoplasmosis parasite can be found in cat feces, and that these eggs, when deposited in soil, can transmit the toxoplasmosis infection to cattle, pigs, sheep and other herbivores. Scientists have not yet demonstrated, however, that the toxoplasmosis infection in humans arises from exposure to cat feces, or from eating meat from animals that had the infection.

Although toxoplasmosis infection was known to pass from mother to fetus, though the placenta, as early as 1940, several recent studies clinically document birth defects in infants whose mothers had the infection during pregnancy. The damage, to brain, eye or general tissue, may be serious. One of the studies, conducted by Charles A. Alford of the University of Alabama at Birmingham, was published in a 1969 issue of *PEDIATRICS*. Alford found six infants of 3,000 studied had been born with toxoplasmosis-caused defects. The other study, published last autumn in the *AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY*, had been carried out by an obstetrics-tropical medicine team at Cornell University School of Medicine in New York City. B. H. Kean and his colleagues reported three infants born with toxoplasmosis defects out of 4,000 newborns delivered at New York Hospital.

Articles on toxoplasmosis have been appearing in newspapers and magazines recently. One possible reason for the current interest is the publication of the Cornell study results in September. However, according to Leon Jacobs, assistant director for collaborative research at the National Institutes of Health, and a long-time authority on toxoplasmosis, much of the recent hoopla appears to have been triggered by public relations efforts on behalf of a firm that makes a diagnostic kit for

toxoplasmosis infection. A diagnostic test for toxoplasmosis, Jacobs told *SCIENCE NEWS*, is very much needed. But he and other toxoplasmosis investigators tend to agree that some of the articles of late, not necessarily those stemming from public relations efforts, have scared the public unduly. Cat lovers have been particularly upset because several of the articles came down hard on the dangers of cats transmitting toxoplasmosis to pregnant women.

After reading these articles, in fact, hundreds of people got in touch with their local chapters of The National Foundation-March of Dimes, which deals in the prevention of birth defects. Questions such as "Now that my wife is pregnant, should we get rid of our cat?" or, "Should we avoid visiting friends with kitty litter in the bathroom?" were frequent. The foundation got in touch with the Cornell toxoplasmosis researchers, the Center for Disease Control of the U.S. Public Health Service, and the American Veterinary Medical Association, in order to pull together the latest facts about toxoplasmosis. The foundation then compiled the facts into an information bulletin, which was sent out to foundation chapters last week.

These are some of the answers the foundation has come up with, and which toxoplasmosis experts, such as Kean's group, Jacob Frenkel and Leon Jacobs, tend to agree on:

The toxoplasmosis parasite has been found in raw or undercooked lamb or pork, but rarely in beef. However, pregnant women might be wise to cook all their meat to 140 degrees F., and at restaurants order meat well done. Kitty litter should be changed every day, and by someone other than the pregnant woman. A cat should be fed canned or dry cat food and not be allowed to hunt birds and other wild animals that might transmit the infection. Women should avoid digging in the garden during pregnancy if there is any likelihood that cat feces may have been buried in the area. Pregnant women should avoid taking on a new pet cat. □

Emergency care

Emergency care—one of the biggest gaps in U.S. health care delivery—may be getting a shot in the arm soon. In his State of the Union message last week, the President promised to send to Congress soon a proposal for "new systems of emergency health care that could save thousands of lives annually." However, Rep. Paul G. Rogers (D-Fla.), chairman of the House Public Health and Environmental Committee, has beaten him to the draw. Rogers introduced legislation Jan. 24 to develop effective and innovative methods of emergency care services. □

Marijuana commission finds usage high

Approximately 24 million Americans have used marijuana at least one time. A national survey reports that more than 8 million are still using the drug. The survey, conducted for the National Commission on Marijuana and Drug Abuse (SN: 5/22/71, p. 349), was released last week in Washington by commission chairman Raymond P. Shafer. Usage figures are 33 percent higher than the commission had expected, but Shafer points out that after age 25 pot smoking falls off rapidly. "One possible explanation seems to be that people outgrow it," he says. According to the survey, the biggest single reason for terminating usage is loss of interest (81 percent of the adults said they would never smoke pot again). Twice the proportion of adults report this motive for quitting as report the next most compelling motive—concern over the legal status of marijuana.

A major preoccupation of the commission is the legal status of the drug. Of the adults surveyed, 52 percent favor a nonlegal approach to marijuana control. The sale of marijuana is regarded as more objectionable than its possession. Most parents would discourage but not forbid its use by their children.

More than 50 studies and projects on marijuana—including a law enforcement strategy project, a study of the long-term acute effects of marijuana usage, a study of marijuana use and its relationship, if any, to crime, and national and international hearings—will be part of the commission's final report. It is scheduled for release March 22. □

Milk virus and cancer

Sol Spiegelman and his colleagues at the Institute of Cancer Research at the Columbia University College of Physicians and Surgeons have found, in recent months, virus in the milk of certain lactating women. The small sample of milks tested suggest that the virus might be more prevalent in the milk of women from families with breast cancer. The virus, they found, also contains the enzyme reverse transcriptase which is a known property of various animal RNA tumor viruses. The team recently got mouse tumor virus RNA's to cross chemically with some human tumor RNA's (SN: 1/22/72, p. 56). They are now trying to isolate enough human milk virus to see whether it too might chemically hybridize with human tumor material. Such interaction, the team believes, would provide one of the strongest arguments yet that a virus is implicated in human cancer. □