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Spontaneous Psittacosis Infections of the Canary and Butterfly Finch.

K. F. MEYER AND B. EDDIE.

From the California State Department of Public Health and the George Williams Hooper Foundation, University of California.

The epidemiologic reports by Roubakine,[1] Sturdee and Scott[2] and Armstrong[3] mention instances of human psittacosis cases associated with canaries. Furthermore, Elkeles,[4] Levinthal[5] and Blanquinque[1] have experimentally proven the susceptibility of canaries and finches to the virus. An opportunity was afforded to study a group of canaries which were associated with 2 human cases for the presence of the virus, and thus to establish conclusively the spontaneous existence of psittacosis in this species.

Late in March, 1932, Dr. James B. Luckie reported 2 cases of psittacosis—a man and his wife whose only contact was with canary birds (*Serinus canaria*). About 2 weeks before the onset of the illness of Mrs. H. a canary had been bought from a pet shop in South Pasadena. This bird was placed in a cage with 12 other canaries. It died within a few days and the carcass was destroyed. The 12 canaries which had been in contact with the sick bird, were chloroformed about 6 weeks after the introduction of the sick bird. At autopsy the spleens of 2 birds were slightly elongated and thickened (9 and 11 mm. long) and the livers were mottled, fatty and enlarged. In the remaining 10 canaries the sizes of the spleens varied from 6 to 10 mm. The livers and spleens were thoroughly macerated in broth (10% suspension) and injected intraperitoneally into mice. A relatively weak virus was demonstrated in the viscera of 3 canaries. It is of interest that one of the Serinuses revealed no anatomical markings suggestive of infection. The virus, apparently present in small amounts, was readily passaged. This is evidenced by the schematic presentation of the investigation of canary 192 in Chart 1.

While inspecting an aviary a listless butterfly finch or nonpareil

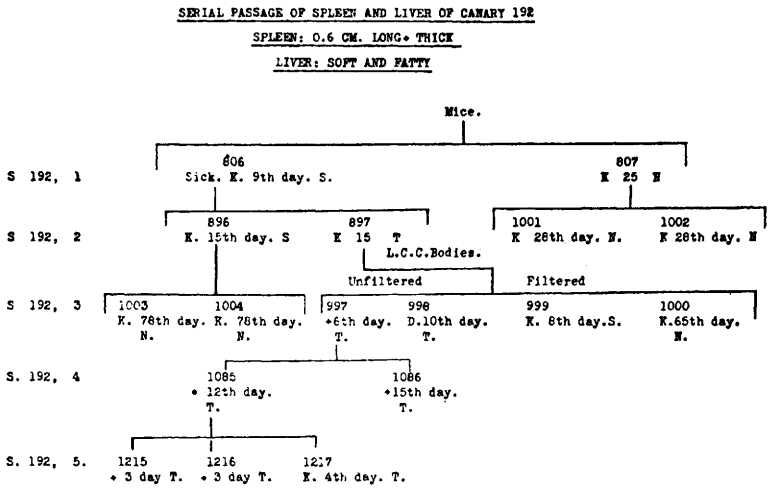
[1] Roubakine, *Monthly Epidemiological Report, League of Nations*, 1930, **4**, 170.

[2] Sturdee and Scott, *Rep. on Pub. Health and Med. Subjects*, London, 1930, **61**, 19.

[3] Armstrong, *Pub. Health Rep.*, 1930, **45**, 2014.

[4] Elkeles, *München. med. Wchnschr.*, 1930, **77**, 139.

[5] Levinthal, *Klin. Wchnschr.*, 1930, **9**, 654.



+ = died, K = killed, T = typical lesions, S = enlarged spleen, ballooned duodenum, but no necroses, N = normal viscera.

(*Cyanospiza ciris*) with ruffled plumage in a pen with infected parrakeets attracted attention. A close examination showed soiled tail feathers and a distended abdomen. The autopsy of this slightly emaciated male bird revealed an enlarged mottled liver of deep saffron yellow, an enlarged spleen, liquid intestinal content and empty crop and gizzard. Culturally the organs were sterile and L. C. L. bodies were not found. Suspensions of the ground liver and spleen killed mice in 10 days with lesions and elementary bodies typical of the psittacosis virus. Successive passage through mice shortened the incubation time and intensified the anatomical lesions.

In view of the above findings it is apparent that birds other than the representatives of the psittacine family, may be afflicted with a disease that is highly communicable to man. The presence of such an infection is easily demonstrated by mouse inoculation tests.