

Horses were reinfected 40 days after the first inoculation. Horse 1 was infected with a mixture of strains Sudarkina, Razdolg (isolated in Astrakhan Oblast from a CHF patient), and 269. Horse 2 was infected with Sudarkina strain. Results of DPRA tests from both horse sera taken on day 4, 7, 10, 14, 17, and 21 after reinoculation of CHF virus were practically identical with all strains (Table 27).

These data show that sera from cattle naturally infected with CHF virus in Rostov Oblast as well as sera from horses experimentally infected with CHF virus strains isolated in Rostov Oblast reacted iden-

tically in DPRA with antigens of virus isolated in Rostov and Astrakhan Oblasts, and in Bulgaria.

Application of DPRA for CHF virus strains gave no advantage in obtaining large numbers of positive results or higher antibody titers in cattle and sheep of the Rostov CHF focus and also in horses experimentally infected with CHF virus strains isolated in focal areas of Rostov and other oblasts.

These results confirm the data on antigenic identity of CHF virus strains isolated in different distribution areas of this infection.

Certain Data on Serological Investigation of Patients Recovered from CHF in Rostov Oblast

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In 1969, Karinskaya and coworkers reported that antibodies in CHF patients from Rostov were found by CF and DPRA on day 11–15 after onset of infection. During this period, logarithms of average geometric antibody titers were 2.0 log (titer 1:4) in CF and 0.7 log (only undiluted sera reacted) in DPRA.

Maximum levels of CF and DPRA antibody titers (3.7–3.8 log and 1.9–2.4 log) were recorded 2 months after onset of infection. After 6–8 months, antibody titers gradually decreased to 2.5 log by CF and to 1.4 log by DPRA (Fig. 2).

Complete disappearance of antibodies was observed after 1 year in most convalescents (33% by CF, 41.7% by DPRA) (Fig. 3).

Patient age and sex did not affect the immune response detected by CF and DPRA.

In this report, we present results of serological investigation of convalescents 1–5 years after recovery from CHF.

CF antibodies were found in 66.2, 51.4, 29.4, 31.5, and 70% of patients 1, 2, 3, 4, and 5 years, respectively, after recovery from infection.

We wish to mention that frequency of CHF clinical diagnosis was 76.8% during the year of infection (data from 1968 and 1969 outbreaks). DPRA antibodies were detected in 69.4, 48.5, 33.3, 40.0, and 66.6% of convalescents 1, 2, 3, 4, and 5 years, respectively, after recovery from infection. The CHF clinical

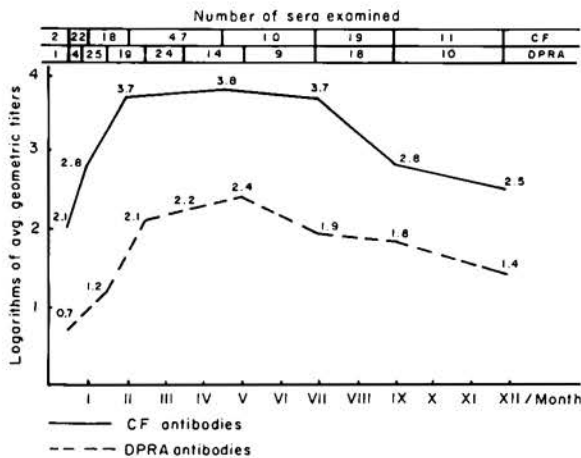


FIG. 2.—Dynamics of CF and DPRA antibody titers in CHF patients in the year of disease.

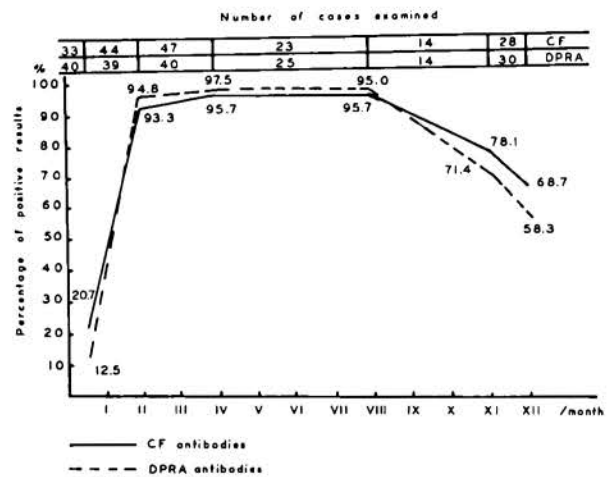


FIG. 3.—Results of investigating CHF patients by CF and DPRA in the year of disease (1968). (CHF diagnosis confirmed serologically in all cases).