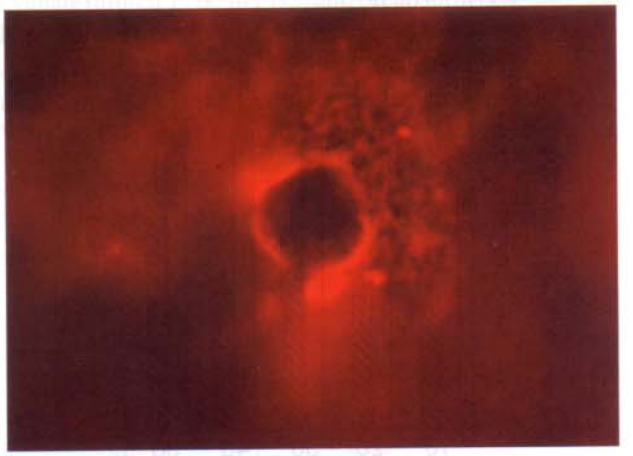

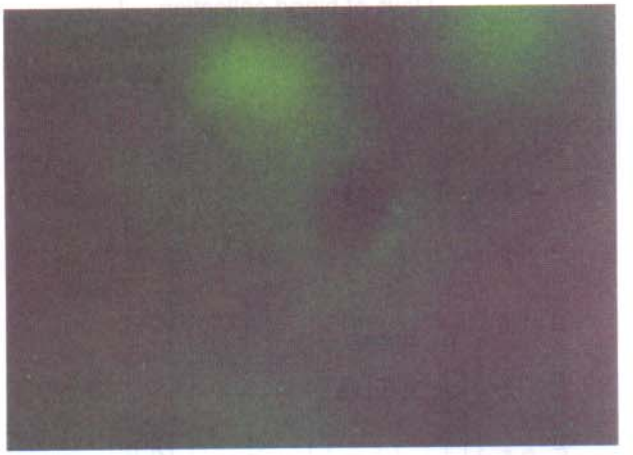

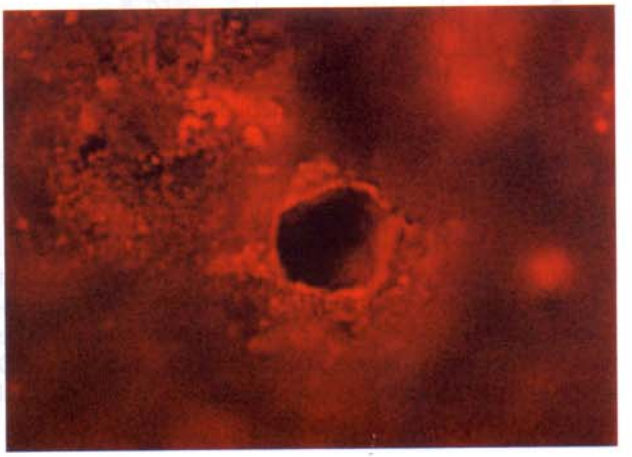

Likewise, in mice treated with 50 μg of ISF, the inhibition of the primary and secondary antibody responses was not significant. Values of mice immunized with SRBC were similar to those for mice immunized with KLH.

Effect of ISF on the concentration of immunoglobulins after the primary and secondary immunizations

Figure 4 illustrates the concentrations of IgG and IgM in milligrams per ml in blood serum of experimental and control mice immunized with KLH. The intrauterine treatment of mice with 100 μg of ISF inhibited the production of IgM and IgG. The concentration of IgG decreased to 4.7–6.1 mg per ml of blood serum collected 10 to 30 days after the primary immunization in comparison to 10.4–12.2 mg per ml of that from control mice nontreated with ISF. The difference in the concentration of IgG in the blood serum between ISF-treated and control mice was statistically significant until day 40 after the primary immunization. The concentration of IgM decreased to 0.2–0.7 mg per ml of blood serum collected on days 10 to 50 after the primary immunization in comparison to 0.6–2.1 mg per ml blood serum from control mice.

Adsorption of ISF on WBC and on the lymphocytes residing in reproductive tract tissues

Cryosections of vagina, cervix, oviduct, uterus and ovaria obtained from the ISF-infused mice were stained by the double immunofluorescence method. Detection with the monoclonal antibody to ISF plus anti-mouse immunoglobulin conjugated with FITC revealed adsorption of ISF on the lymphocytes residing in the reproductive tissues (green fluorescence, Fig. 5a). When the same FITC-labeled cryosections were incubated with anti-CD19 conjugated with R-phycoerythrin, red fluorescence indicated the colocalization of ISF on B lymphocytes (Fig. 5b). In the tissues of control mice, nontreated with ISF, the adsorption of ISF on lymphocytes was not detected (no fluorescence on the lymphocytes, Fig. 5c), but red

Fig. 5 A (top) – D (bottom). The tissue sections of mouse uterus collected 10 days after cessation of 6-fold intrauterine administration of 100 μg ISF. Detection with monoclonal antibody to ISF and incubation with porcine anti-mouse IgG conjugated with FITC revealed the adsorption of ISF on lymphocytes populating the mucosal tissues of uterus (green fluorescence, Fig. 5a). When the same FITC-labeled tissue section was incubated with anti-CD 19 conjugated with R-phycoerythrin, red fluorescence indicated the colocalization of ISF on B lymphocytes (Fig. 5b). The tissue section of a control mouse (ISF-untreated) showed no reaction with monoclonal antibody to ISF after incubation with anti-mouse FITC-conjugated IgG (Fig. 5c). When the same tissue section was incubated with anti-CD 19 conjugated with R-phycoerythrin, red fluorescence revealed the localization of B lymphocytes residing in the tissue (Fig. 5d).