Transfer of IgG from serum to lachrymal fluid in chickens.

Toro,

Lavaud,

Vallejos,

Ferreira,

Pure 125I-radiolabeled chicken IgG was inoculated intravenously into 2-week old chickens. Radioactivity in lachrymal fluid samples was first detected 10 minutes postinoculation (PI). Radioactivity levels declined up to day 20 PI, when they reached marginal levels. Sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) followed by autoradiography of lachrymal fluid samples, taken daily for 16 days, showed the presence of radioactive polypeptides in the same positions as their stained control counterparts at molecular weights corresponding to heavy and light chains of immunoglobulins. Radiolabeled IgG also was detected in serum samples of the inoculated chickens. SDS-PAGE followed by autoradiography of lachrymal samples taken until day 16 PI showed similar results. These results demonstrate that transfer of IgG from serum to lachrymal fluid does occur in chickens.