

Behavior of rabbit dental tissues in heterospecific association with embryonic quail ectoderm

Fuenzalida, Marcela

Lemus, Roxana

Romero, Sergio

Fernandez?Valencia, Rafael

Lemus, David

The behavior of dental tissues from the rabbit, *Oryctolagus cuniculus*, in association with epithelium from the quail, *Coturnix coturnix japonica*, has been examined. Adult and embryo rabbits were employed in this study. Dental papillae from teeth at the cap stage from rabbit embryos and dental pulp from adult rabbits were isolated surgically and recombined with skin ectoderm from 72-hour-old quail embryos. The recombined tissues were cultured for 48 hours on semi-solid medium and subsequently removed and placed on chorio-allantoic membranes of 7-day-old chick embryos. Control cultures (dental pulp, dental papillae, and quail ectoderm) showed regression, atrophy, or differentiation according to the phenotype of the tissue. After 8 days in explant culture, heterologous recombinants composed of dental papillae and flank skin ectoderm from quail embryos developed differentiated chimeric tooth structures. It was unclear whether or not enamel was being secreted. The fact that the interactions