

# Odontogenesis and amelogenesis in interacting lizard?Quail tissue combinations

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In this study we examined the possible inductive role of the dental papilla from polyphyodont lizard tooth germs. Flank skin sheets of quail ectoderm enzymatically separated from dermal tissue were recombined with lizard tooth papillae and placed on semisolid medium and cultured for 2 days. Subsequently, the recombinants were removed and placed on the chorioallantoic membrane of chick hosts and incubated for 6 days. After this period of 8 days in explant, control tissues differentiated according to their own phenotypes. Lizard dental papilla alone differentiated as fibroblasts. Quail flank skin ectoderm differentiated into epithelial sheets. Intact lizard tooth buds developed into teeth with dentine and incipient enamel. In the best experimental recombinants, advanced and relatively well-constructed teeth were observed, with clear indications of hard tissue deposition in association with quail epithelium. The results show that mesenchyme of the adult lizard dental papilla and embryonic