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Altri autori (Persone)	NagatsukaHitoshi
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Nota di contenuto	Biology of neoplasms -- Developmental biology of teeth -- Developmental oral craniofacial biology -- Mandibular bone and cartilage development -- Notch signaling in cell differentiation and development -- Cell differentiation in pathological conditions -- Odontogenic neoplasms -- Notch signaling in ameloblastomas and ameloblastic carcinomas -- Cell differentiation in odontogenic neoplasms -- Cell differentiation in neoplasms of bone and cartilage -- Cell differentiation in BMP-induced heterotopic osteogenesis conclusion.
Sommario/riassunto	Development of the oral and craniofacial region is a complex and fascinating set of processes which require a sequential integration of numerous biological steps. For medical and dental doctors, interest is particularly high in this region, because it is composed of three blastoderms - ectoderm, mesoderm, and endoderm - as well as neural crest cells. There are many different types of neoplasms in this region. In general, proliferation, development and cytological differentiation of the neoplastic cells reflect the normal physiological development of the outbreak mother cells and/or tissues. Collected human neoplasm cases, such as osteosarcoma appearing in the oral and craniofacial region, are examined regarding the immunohistochemical expression of some morphogenesis regulation factors. Furthermore, examination

of Notch signaling is also conducted for some odontogenic neoplasms. This book mainly describes the examination results of some morphogenesis regulation factors, such as Notch signaling, in the neoplastic cells originating in the oral and craniofacial region, especially in the odontogenic neoplasms, in both well-differentiated and poorly-differentiated neoplasms of tooth germ enamel organ-derived neoplasm. In general, these morphogenesis regulation factors are responsible for cytological regulation of cell fate, morphogenesis and/or development. The results suggest that these factors play some role in cytological differentiation or acquisition of tissue specific characteristics in neoplastic cells. Furthermore, there would appear to be a relationship between the cytological differentiation in the oral and craniofacial neoplastic cells and the physiological development and differentiation of their originating mother cells and tissues of the oral and craniofacial region.
