Differential Diagnosis of Head and Neck Tumors

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Content

Head and neck pathologies are frequent in childhood but rarely have malignant origin. Traumatic lesions, inflammatory enlargement of the lymph nodes, congenital malformations, cysts, hemangioma, lymphangioma, vascular malformations, and even infectious diseases may mimic malignant conditions. A classical diagnostic workup is well applicable to differentiate between those conditions.

Carefully collected medical history, precise physical examination, and correctly selected imaging and laboratory tests help in preselecting the patients with justified suspicion of malignancy. The flowchart diagram (Fig. 15.1) describes the characteristics of different head and neck masses. Signs and symptoms of malignant head and neck tumors might seem more or less harmless like an enlarged lymph node or unusual swelling, ear ache, bleeding, a sore throat, or difficulties swallowing or breathing. Patients suspicious to have a malignant condition require further detailed imaging and microscopic confirmation. A biopsy should be performed or – in case of small size and favorable localization – a primary excision of the lesion.

Figures 15.2–15.4 show the distribution of malignant head and neck tumors in children and adolescents. Rhabdomyosarcomas and thyroid carcinomas are most often seen, followed by carcinomas of the salivary gland and nasopharyngeal carcinomas. Melanoma of the skin is excluded from this analysis. The following unusual pediatric head and neck cancers are discussed in the following chapter, "head and neck tumors": nasopharyngeal carcinoma, esthesioneuroblastoma, thyroid tumors, oral cancer, salivary gland cancer, and laryngeal carcinoma.

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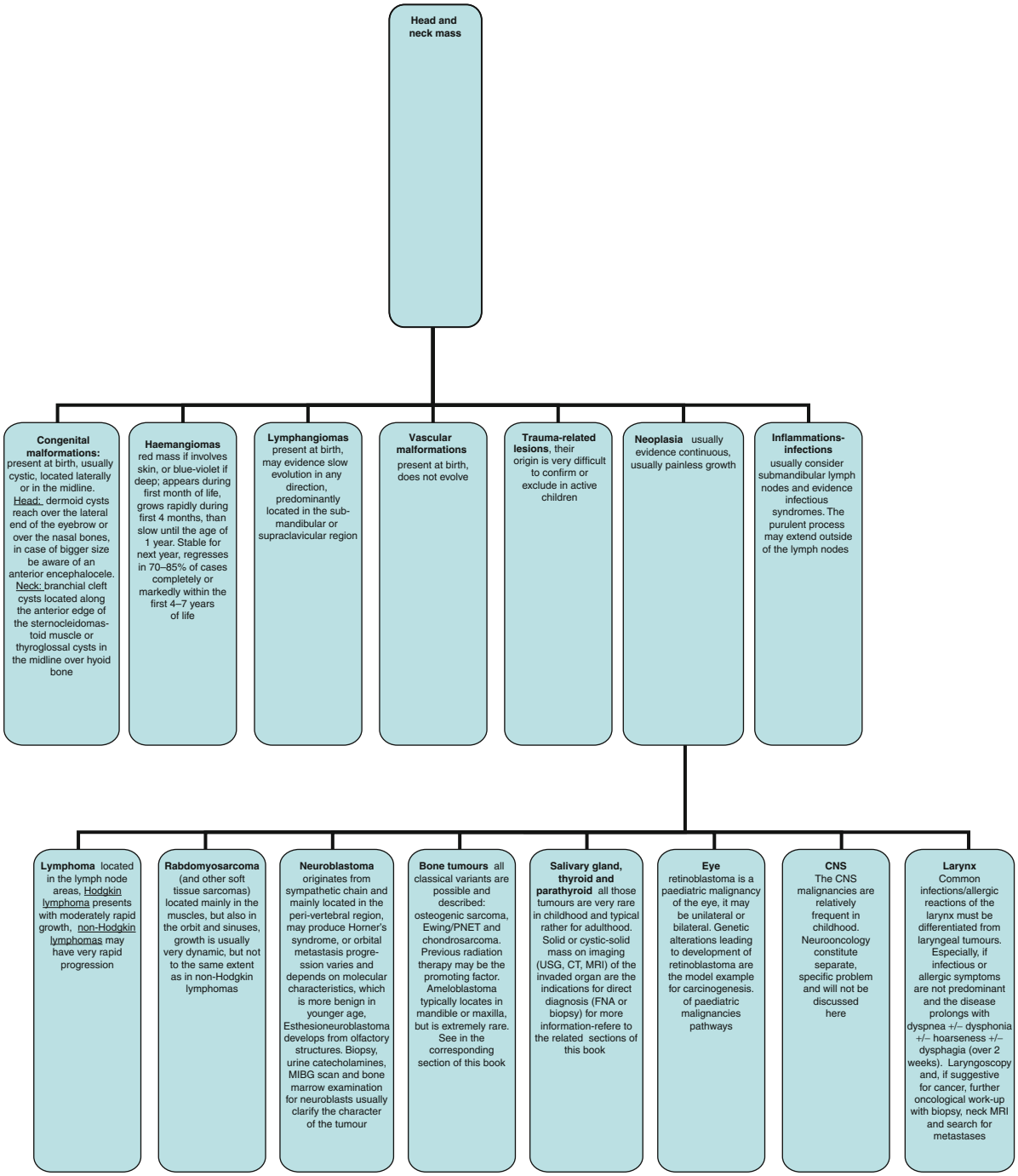

Fig. 15.1 Characteristics of commonly observed head and neck masses and rare malignant entities (Courtesy of Strong and Jako 1972)

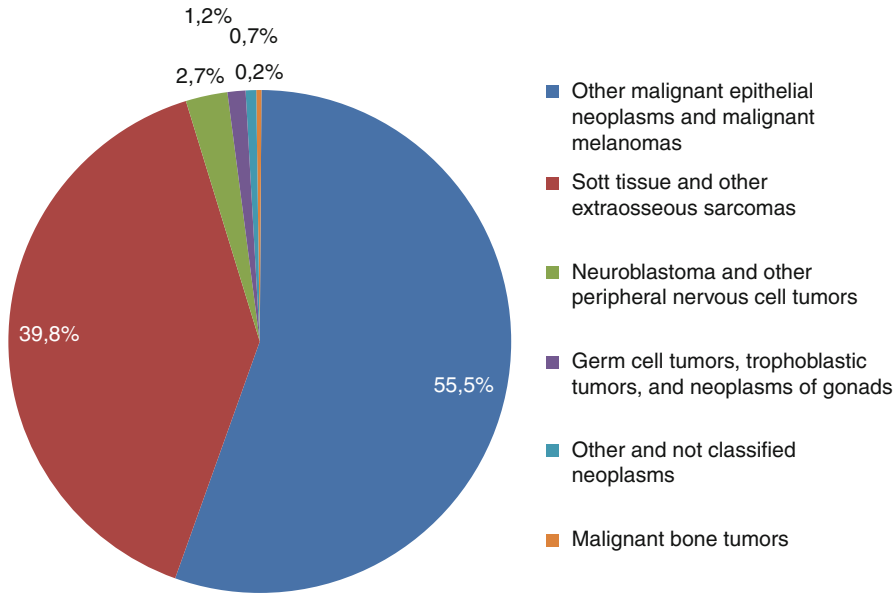

Fig. 15.2 Distribution of head and neck tumors by ICCC-3 category in children under the age of 15 years. Data from the United States Surveillance and End Results Registry (SEER), 1973 to 2004 (*Note*: Melanoma of the skin of head and neck are not included in the analysis)

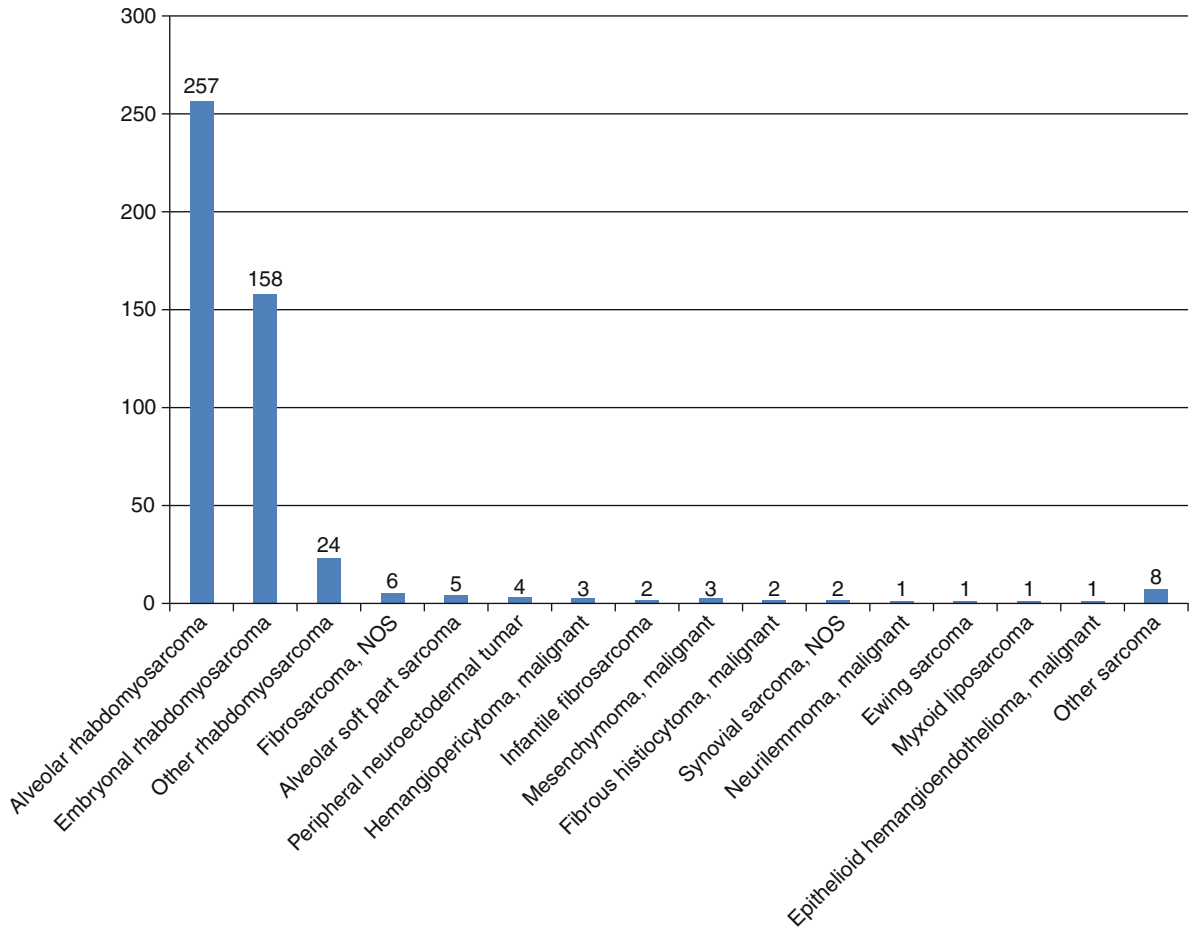

Fig. 15.3 Distribution of soft tissue sarcomas of head and neck tumors by ICD-3 code in children under the age of 15 years. Data from the United States Surveillance and End Results Registry (SEER), 1973 to 2004

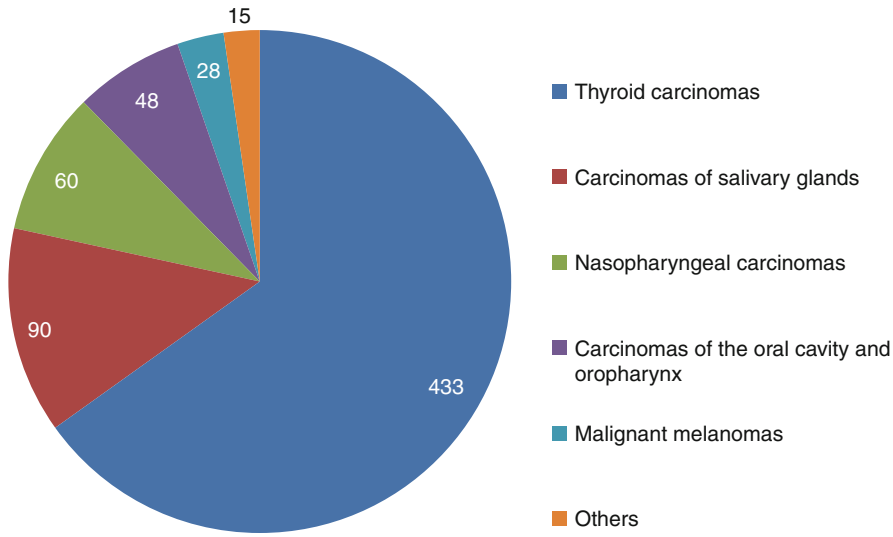

Fig. 15.4 Distribution of "other malignant epithelial neoplasms and malignant melanomas" of head and neck by ICD-3 code in children under the age of 15 years. Data from the United States Surveillance and End Results Registry (SEER), 1973 to 2004 (*Note*: Melanoma of the skin of head and neck are not included in the analysis)

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