MUCOEPIDERMOID CARCINOMA (MEC) OF THE SALIVARY GLAND OCCURRING AS A SECOND MALIGNANT NEOPLASM (SMN) IN THE CHILDHOOD CANCER SURVIVOR STUDY (CCSS)

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The CCSS is a multi-center study of childhood cancer and its sequelae. A cohort of approximately 20,000 5-year survivors has been identified. Two hundred and fifteen survivors have developed SMN. Nine of these patients have had salivary carcinomas. Salivary gland neoplasms are rare in the pediatric population; MEC is an uncommon type of salivary gland tumor. Over a 20-year period at Children’s Hospital, Columbus, we have seen only 2 cases of MEC. One of these is also an SMN. The 9 patients in the CCSS had a variety of primary malignancies: ALL (3), AMML, lymphoma, Hodgkin’s, medulloblastoma, neuroblastoma, and PNET. The salivary gland malignancies occurred within radiation therapy fields. Four of the MECs were low-grade and 3 were intermediate grade. The age at initial diagnosis ranged from 0 to 19 years, with a median of 3 years and a mean of 7 years. The age at diagnosis of SMN was between 10 and 35 years.

The interval between the first and second cancer was 2 to 17 years with an average of 10 years. Seven of the 9 tumors were MEC. Of these, 5 were located in the parotid gland, one in a submaxillary gland, and one in minor salivary tissue in the palate. The other 2 tumors were adenocarcinomas of the parotid gland, not further specified. MEC has not been widely recognized as an SMN. This large CCSS enables us to make new observations.