Neurofibroma

Benign nerve sheath tumor in the peripheral nervous system. In 90% of cases they're found as stand-alone tumors, while the remainder are found in persons with neurofibromatosis type I (NF1), an autosomal dominant genetically inherited disease, they can result in a range of symptoms from physical disfiguration and pain to cognitive disability. Neurofibromas arise from nonmyelinating-type Schwann cells that exhibit biallelic inactivation of the NF1 gene that codes for the protein neurofibromin.

This protein is responsible for regulating the RAS-mediated cell growth signaling pathway. In contrast to schwannomas, another type of tumor arising from Schwann cells, neurofibromas incorporate many additional types of cells and structural elements in addition to Schwann cells, making it difficult to identify and understand all the mechanisms through which they originate and develop.