Background: Undifferentiated sarcomas are malignant tumors of tissues derived from mesoderm and involve oncogenic transformation of mesenchymal cells. The most frequent tumors in the skin are undifferentiated pleomorphic sarcoma and myxofibrosarcoma. We report a case of undifferentiated pleomorphic sarcoma and its therapeutic approach.

Observation: C.B.S, female, 88 years old, reports a nodule of progressive growth in the clavicular region for 3 months. The dermatological exam reveals erythematous and ulcerated nodule, approximately 4 cm in the left infraclavicular region. An incisional biopsy was performed. The anatomopathological examination revealed infiltration of the deep portion of the sample by large cell neoplasia of predominant fusiform shape, with cell nuclei of varying size and shape, with irregular chromatin, mitotic figures, compatible with fusocellular and pleomorphic sarcoma infiltrated. The immunohistochemical panel presented negative results for the expression of antigens (AE1 AE3, p63, 34BetaE12, Protein S-100, SOX-100, Melan-A, AML, Desmin, CD3 and CD34) compatible with Undifferentiated Sarcoma. We chose to excision the lesion with wide surgical margins. The survey of distant metastases was negative.

Key message: Undifferentiated pleomorphic sarcoma is a tumor with histogenesis not yet well defined. In many cases, immunohistochemical and ultrastructural evaluation allows for the probable or definitive classification in histogenetic subtypes of sarcoma. Cutaneous sarcomas are more common in the elderly and are commonly found in the lower limbs, with the head and neck rarely being affected. They are presented as a normocromic or erythematous nodule, texture that varies from elastic to firm and rapid growth. Clinically and in histopathology, they may resemble malignant melanoma, epidermoid carcinoma, dermatofibrosarcoma protuberans, atypical fibroxanthoma and leiomyosarcoma, and the histopathological study associated with immunohistochemistry is necessary. The treatment is based on total surgical resection of the tumor. About 20% to 35% of cases present distant metastasis (usually lung and lymph nodes), and recurrence is common.