LIPOSARCOMA

Liposarcoma is a rare lesion. These malignant tumors arise not from adult fat cells but from primitive mesenchymal cells and so may be found anywhere in the body and need not necessarily be related to fat. Whereas benign lipomas are generally small and subcutaneous, liposarcoma may be large and are almost always located in deeper structures of the body. The head and neck area is an uncommon site.

Microscopically, a well-differentiated liposarcoma may look almost like a benign lipoma, but usually scalloped nuclei (due to pressure of intracytoplasmic fat vacuoles) can be found, and there are immature lipoblasts and occasional giant cells and abnormal mitoses. The pleomorphic liposarcoma is a wildly anaplastic lesion.

Liposarcoma, well differentiated. Prognosis is good with a 55 percent five year survival rate in the well-differentiated type. Triangle indicates large lipocyte, arrows indicate lipoblasts.
Liposarcoma, well differentiated sclerosing, high power photo. Note dense connective tissue with a tumor giant cell (large arrows), scattered lipoblasts (small arrows), and exceptionally large lipocytes (triangles).

Liposarcoma, high power; well differentiated giant cells with “frosted glass” cytoplasm (arrows), a characteristic of the tumor. Graded as well-differentiated. The abundant fibrous tissue was arranged in broad bands throughout the tumor.
Liposarcoma, pleomorphic type. Large giant cells (large arrows) with hyperchromatic nuclei and marked hypercellularity are characteristic of this type of liposarcoma. Scalloped nuclei are also seen at the margins of lipocytes (small arrows). Small triangles indicate mitoses. The prognosis is poor.