

Giant Malignant Myxoid Fibrous Histiocytoma of the Chest Wall

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A 79-year-old woman was admitted with a giant chest wall mass (Figures 1 and 2) and symptoms of dyspnoea that were progressively aggravated during the last 3 months. The mass was initially detected by the patient 1 year earlier, but she did not ask for medical consultation because of its initial small dimensions and the lack of symptoms. The patient underwent uncomplicated resection of the giant mass (measuring 34 cm in its maximal dimension and weighting 6.9 kg) en bloc with the muscles in contact. The tumor destroyed the third through seventh ribs, and these were also resected; the chest wall defect was reconstructed with a 2-mm e-polytetrafluoroethylene mesh. Re-establishment of the chest wall shape and re-expansion of the left lung had as result relief of dyspnoea symptoms and improvement of the quality of life. Histologic and immunohistochemical examination of the tumor established the diagnosis of high-grade myxoid malignant fibrous histiocytoma (MFH)/myxofibrosarcoma. The tumor was predominantly composed of myxoid areas (>50%) with spindle cells and intermediate atypia and nonmyxoid areas with high cellularity and atypia. The immunohistochemical stainings for vimentin, myoglobin, CD68, and CD34 (focally) were positive, whereas the stainings for smooth muscle actin and desmin were negative.

Despite MFHs are the most common soft tissue sarcomas in adults, primary MFHs of the chest wall are relatively rare tumors.^{1,2} MFHs tend to reach large dimensions if left untreated within short periods of time. Radical surgery is the optimal treatment for MFHs of the chest wall including all the surrounding structures in contact with the tumor, even if the tumor has large dimensions. Local recurrence is observed in 30% of cases, probably as the result of nonradical surgery or spread of tumor cells within the operative field during resection or extirpation of large tumors.²



FIGURE 1. Computed tomography scan of the chest: huge inhomogeneous chest wall mass compressing the left chest wall and inverting the concave of the ribs. The left lung is almost entirely collapsed because of external compression. The compressed left lateral chest wall tends to reach the pericardium.



FIGURE 2. Huge chest wall mass occupying the whole posterolateral left chest wall.

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Disclosure: The authors declare no conflicts of interest.

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ISSN: 1556-0864/10/0506-0907