



Abstract

the left upper arm for 4 months. Magnetic Resonance Imaging (MRI) confirmed the presence of a well-defined fibroblasts and myofibroblasts in an interlaced pattern with high mitotic index and evident multinuclear giant cells. Erythrocyte extravasation was easily seen in the stroma. The tumor border was infiltrative. Immunohistochemically, ALK, and β -catenin. Molecular detection demonstrated evidence of Ubiquitin-Specific Peptidase 6 (*USP6*) rearrangements in this tumor. Based on the findings, the tumor was diagnosed as intramuscular NF. At 56 months

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Received:

Revised:

Reviewed:

Editor assigned:

Published:

Citation:

Nodular Fasciitis; A Challenging Histopathologic Diagnosis Confirmed by Molecular

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rst excluded for the tumor's growth pattern and -catenin negative. However, it was still difficult to distinguish the tumor from a (myo) broblastic sarcoma.

Molecular detection was performed on 4 µm para n-embedded

Results and Discussion

Intramuscular NF is a rare benign fibrous tumor, accounting for only 5.9% of 272 NF cases in a previous retrospective study [6]. Unfortunately, there is limited data about intramuscular NF, particularly regarding the clinicopathological features. As far as we know, until now, only seven cases of intramuscular NF have been reported, including our case, in the English literature via a search of the PubMed database [7-12]. All seven cases are reviewed and summarized in Table 1. Although there was no predominant gender difference (male to female ratio, 3:4) among these seven cases, there was a wide age range from 11 to 46 years (mean age, 32.5 years). Tumors were mainly found in deep locations of the limbs and trunk, including the thigh, rectus abdominis muscle, gluteal region, right axillary tail, erector spinae muscle, neck, and upper arm. The preoperative duration was relatively short, no more than 2 months in four cases, while our case was 4 months, and the other two were over 1 year in duration. All seven patients complained of pain, from mild to severe. Other clinical symptoms included nerve compression, swelling, and numbness. The patient in this report just felt a little discomfort, but the mass in the upper arm gradually increased. The follow-up periods ranged from 6 months to 10 years. Five patients recovered with no

evidence of recurrence or metastasis. However, one patient developed multiple recurrences and ultimately metastasis at their 10-year follow-up, which was caused by inadequate surgery for the complexity of the deep anatomical location and poorly infiltrated border. Fortunately, our patient had been followed up 56 months with no

