Case Report

Myxofibrosarcoma of the Leg Surgically Induced after a Benign Tumor: Exceptional Situation

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Abstract

Myxofibrosarcomas are malignant conjunctive tumors, slowly evolving in most cases, we report in this work an exceptional case of a myxofibrosarcoma developing at the level of the bed of an exeresis of a benign tumor after 4 years, raising the hypothesis of a surgically induced sarcoma.

Keywords: Myxofibrosarcoma · Surgically induced · Excision

Introduction

Myxofibrosarcomas are malignant conjunctival tumors, slowly evolving in most of the time, they are rare with an annual incidence close to 18 cases /million inhabitants [1]. Surgical excision is the main therapy, which gives excellent results.

The main factors favoring their occurrence are constitutional and environmental factors including radiotherapy and chemotherapy, but their occurrence following surgery or trauma has never been demonstrated. We report in this work an exceptional case of a myxofibrosarcoma developing at the level of a benign tumor resection after 4 years, raising the hypothesis of a surgically induced sarcoma.

Medical Observations

Mrs. BN 49 years was operated in 2014 for biopsy exeresis of a painless nodular mass (Figure 1), mobile of the posterior face of the superior third of the left leg whose anatomopathological study returned in favor of a nodular fascist [1].

The evolution after 4 years was marked by the increase of the volume of the lesion and the occurrence of local ulceration becoming painful, the whole evolving in a context of unencrypted fever and weight loss at 5 kg.

Clinical examination at admission noted swelling at the posterior-internal surface of the upper third of the left leg (Figure 2), nauseating, measuring 7 cm long axis, hard, fixed with respect to the superficial plane and adherent to deep plane, ulcero-budding with areas of necrosis painful on palpation and bleeding at the slightest touch without lymphadenopathy and adherent to deep plane, ulcero-budding with areas of necrosis painful on palpation and bleeding at the slightest touch without lymphadenopathy and adherent to bleeding at the slightest touch without lymphadenopathy

The simple radiological assessment showed no underlying bone lesions (Figure 3). MRI revealed a superficial subcutaneous superficial hypo-intense

posterior internal soft tissue tumors in T1 and hyperintense heterogeneous T2 in distinct and heterogeneous contrast with central necrotic-hemorrhagic zones, it measures 70 × 62 × 46 mm of poorly circumscribed major axes locally extended to the internal and external gastrocnemius muscles, the fibular tibio vascular structures remained distant from the tumor (Figure 4). The extension assessment was negative A biopsy was performed. Examination Pathology concluded that myxofibrosarcoma had a high grade of malignancy (Grade 3 FNLCC). The patient's file was presented in a multidisciplinary consultation meeting, a surgical revision was a surgical revision was performed by a wide



Figure 1. Biopsy exeresis of a painless nodular mass.



Figure 2. Clinical examination posterior-internal surface of left leg.



Figure 3. Radiological assessment of bone.



Figure 4. MRI of tumor.



Figure 5. Pathological examination of myxofibrosarcoma.

excision with a safety margin of 3 cm (Figure 5). At 6 months post-operative, no signs of recurrence were found.

Discussion

Among soft tissue tumors, FN remains a relatively common benign tumor process in the first 30 years of life [2,3]. This tumor was first described as a fibromatous pseudo sarcoma by Konwaler et al. [4]. The etiology of the FN remains unknown. However, the literature frequently reports, as in our observation, repeated surgical traumas that may be at the origin of this tumoral process [1]. The difficulty of the diagnosis lies in the elimination of the numerous differential diagnoses and especially in the assertion of the benign nature of the lesion [5]. From a clinical point of view, the fast evolution of the FN (from a few days to a few weeks) should make people fear a malignant process [5,6]. A preclinical diagnostic procedure must be undertaken in particular using an MRI despite the absence of systemic signs [6]. The diagnosis of these myofibroblastic and fibroblastic tumors is difficult, particularly the recognition of benign or malignant character, due to the frequent absence of specific immunohistochemical markers. The diagnosis is most often based on careful morphological analysis interpreted according to the clinical context. The FN is part of the pseudo sarcomas. It is most often a well-limited and unencapsulated lesion of less than 3 cm [7]. FN is a benign lesion, which is important not to be confused with sarcoma to avoid radical surgical treatment [3]. The expression of HMGA2 in immunohistochemistry and the biology can provide diagnostic assistance.

Conclusion

This exceptional observation raises the hypothesis of surgical trauma in the hypothesis of surgical trauma in the genesis of lower limb sarcomas, this theory must henceforth be part of the etiologies of lower extremity sarcomas imposing adequate surveillance of surgical scars.

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