Primary low-grade fibromyxoid sarcoma of breast: A rare case report with immunohistochemical and fluorescence in situ hybridization detection

Yutao Zhang Master, Dan Wan Master, Fuping Gao Master

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Case study

Primary low-grade fibromyxoid sarcoma of breast: a rare case report with immunohistochemical and fluorescence in situ hybridization detection

Summary

Low-grade fibromyxoid sarcoma (LGFMS) is a rare tumor with a bland histological appearance but malignant biological behavior. Primary LGFMS of breast has not been described in the English-language literature. Here, we report a 58-year-old Chinese female patient who presented with a painless mass in the right breast for more than 30 years. The tumor consists of spindle cells resembling fibroblasts and includes two kinds of morphological change, which are alternating collagenized hypocellular zone and cell-rich myxoid area. There are more arcades of curvilinear blood vessels. The spindle cells are not heteromorphic and mitotic figures are scarce. Immunostaining shows tumor cells are positive for vimentin, mucin4, CD99 and Bcl-2, but negative for SMA, desmin, S100, CD34, ALK and myogenin. *FUS* gene rearrangement is positively detected by FISH. The patient has been followed up for 59 months and is in a favorable condition. This rare location of LGFMS should be noted.

Key words:

Low-grade fibromyxoid sarcoma; Breast; Differential diagnosis

1. Introduction

Low-grade fibromyxoid sarcoma (LGFMS) was a special subtype of fibrosarcoma and first described by Evans in 1987 [1]

some past literatures and designated formally as LGFMS in 1993 [2]. When it presents with prominent and well-formed collagen rosettes, it is called hyalinizing spindle cell tumor with giant rosettes (HSTGR). LGFMS and HSTGR are identical and